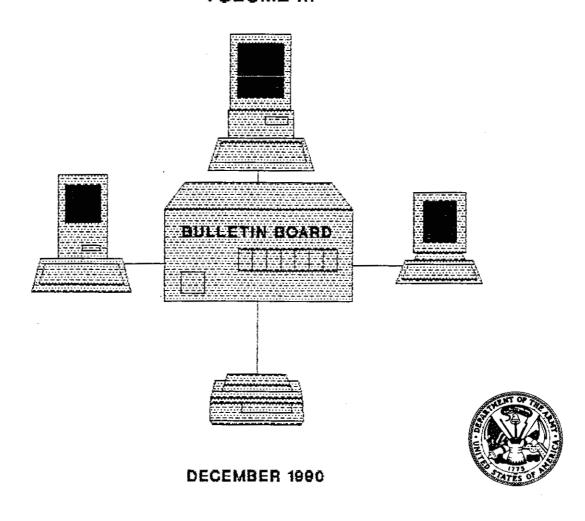
US ARMY CORPS OF ENGINEERS CRITERIA MANAGEMENT UNIT 650 CAPITOL MALL ROOM 5558 SACRAMENTO, CALIFORNIA 95814 (916) 551-2333

ARCHITECTURAL-ENGINEER'S GUIDE

SPECIFICATIONS VOLUME III



INIRODUCTION

The December 1990 issue of the Architectural-Engineer's Guide for Specifications marks the beginning of a new era for the Sacramento District Corps of Engineers. Due to more efficient automation, many new procedures have been adopted. The Sacramento District Corps of Engineers is constantly striving for newer and better ways to serve our customers and your suggestions and comments are welcomed.

Highlights of changes:

- o New Abridged Guide Specifications (CEAGS).
- o Technical References & Standards are now accessible via the electronic bulletin board.
- o A new requirement to submit project specifications (including "marked up specs") on 5-1/4" floppy disks.
- o New requirements for the use of proprietary items.
- o Suggestion form for our customers to send us their suggestions and/or comments.
- o More current guide specifications available.
- o New index showing quarterly changes, deletions and new available guide specifications. This index includes information on superseded guides.

DEPARTMENT OF THE ARMY U.S. ARMY ENGINEER DISTRICT, SACRAMENTO CORPS OF ENGINEERS 650 CAPITOL MALL SACRAMENTO, CALIFORNIA 95814-4794

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Please write down any ideas, comments or suggestions on how we may better serve you.

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SACRAMENTO DISTRICT (SPK)

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GENERAL

INSTRUCTIONS

INSTRUCTIONS FOR PREPARATION OF OUTLINE SPECIFICATIONS

ARCHITECTURAL-ENGINEER GUIDE VOLUME SPECIFICATIONS-DEC 1990

PART 1 GENERAL INSTRUCTIONS

1.1 GENERAL

Outline specifications shall accompany concept preliminary drawings, estimates, and the Basis for Design. They shall show items to be covered in the Project Specifications that will subsequently be prepared for bidding purposes. Outline Specifications shall list or describe the material to be included in the Contract Specifications. To determine if the final design will provide an operable and usable facility within the budgeted funds, all Outline Specifications and other preliminary data shall be reviewed by the Corps of Engineers and the using agency. Information not included in the Basis for Design or shown on the drawings must be provided in the Outline Specifications so that the reviewer can determine the quality and cost of the structure and equipment. However, the sequence of the information presented is flexible.

1.1.1 HQUSACE/OCE (Headquarters U. S. Army Corps of Engineers/Office of the Chief Engineer) Guide Specifications

Guide specifications issued HQUSACE/OCE are prefixed with CEGS- and/or CEAGS-. They establish the format to be used for project specifications in order to maintain uniformity of construction throughout the Corps. The basic guides contain requirements that have been coordinated with industry. They may be used as worksheets for editing by the preparer of project specifications. Certain requirements in the guide specifications have general applicability to all projects, while others vary from project to project and must be modified.

1.1.2 Sacramento District Prepared Guide Specifications

Guide specifications written exclusively for use within the Sacramento District are designated by the prefix SPK-. The SPK Guide Specifications are prepared by the Sacramento District when no other guide specification is available concerning a particular topic.

1.1.3 Project Specifications Prepared by Other Districts

Occasionally, the Sacramento District is directed to site adapt and construct a design created in another Corps of Engineers District. The project specifications prepared by another district may then be authorized for use to perform similar work in the Sacramento District. Project Specifications prepared by other districts shall be carefully reviewed to determine necessary modifications for site adaptation. Revisions will be made ONLY when necessary in order to conform to the latest applicable HQUSACE/OCE guide specification and any policy regarding it's use.

1.1.4 Statement of Method of Materials

When CEGS, CEAGS, or SPK Guide Specifications are unavailable, a statement of the method of construction and materials to be used is required in the outline specification.

1.1.6 Specification Format

The organization and numbering of specification divisions shall conform to the Construction Specification Institute (CSI) format. See paragraph "Instructions for Preparation of Final Project Specifications" in this guide.

The CSI format used for the numbering of guide specifications standardizes the organization for sections of the Technical Specifications. They are separated into sixteen (16) categories, each division having a standard subject heading.

1.2 AVAILABILITY OF GUIDE SPECIFICATIONS, REFERENCED SPECIFICATIONS, AND STANDARDS

Most of the specifications and standards referenced in the guide specifications are available for viewing at the U.S Army Corps of Engineers, Sacramento District, Specifications Section, 650 Capitol Mall, Room 7045, Sacramento, California 95814.

1.2.1 Obtaining Copies of Federal and Military Specifications and Standards and Other Referenced Publications

Federal and Military Specifications and Standards may be requested by letter, by DD Form 1425 (available from the Project Manager), or by telephone, from the Commanding Officer, Naval Publications and Forms Center, 5801 Tabor Avenue, Philadelphia, Pennsylvania 19120, (215) 697-3321.

Other referenced publications are available from the organizations listed in Appendix M.

When requesting publications by letter, clearly indicate the Title, number, date, latest amendment number and date (if any), and the Solicitation or Contract Number for which the publication is to be used.

1.2.2 Obtaining Guide Specifications Via Electronic Bulletin Board

The Sacramento District operates a 24 hour, 7 day a week electronic bulletin board for guide specifications called SPKSPECS. To request access to the bulletin board and/or for information concerning the electronic bulletin board, call (916) 551-2333 between the hours of 8:00 a.m. and 4:00 p.m., Monday through Friday, excluding holidays. Once a user log-in is assigned, HQUSACE/OCE and Sacramento District prepared guide specifications can be obtained electronically by calling (800) 445-8643 or (916) 551-4986. The bulletin board is in ASCII format and supports 1200, 2400, 4500 or 9600 baud rates.

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The SPKSPECS modems are manufactured by Microcom. The protocol for all communications is 8 bit, 1 stop bit, and NO parity. The system is operated on a Sperry mini computer, with a 515 Megabyte hard disk. The bulletin board is a UNIX System V, multi-user, remote, bulletin board that has been modified by the Sacramento District. It was originally written by Brandon S. Allbery and is named the <u>UNaxcess</u> System. Please see the SPKSPECS USER MANUAL (Appendix N) in this guide for further information on accessing the Sacramento District Electronic Bulletin Board.

Applicable specification sections should be obtained prior to the preparation of outline specifications, but after the materials of construction have been determined. Please note the date of each guide specification each time you enter the bulletin board to assure obtaining the most current guide available.

1.2.3 Obtaining Printed Copies of Guide Specifications

Copies of guide specifications can be obtained through the Project Manager by special request only. You may order them by using the request forms provided in the Appedices or by contacting your Corps Project Manager. Otherwise, all specifications shall be obtained via the electronic bulletin board. Questions regarding any guide specifications may be directed to the staff in the Criteria Management Unit at (916) 551-2333 between the hours of 7:00 A.M. and 4:00 P.M. Monday through Friday, excluding holidays.

* * * * *

PART 2 INSTRUCTIONS FOR PREPARATION OF OUTLINE SPECIFICATIONS

NOTE: Specifications used as the basis for the preparation of Outline Specifications are described in PART 1 and are listed below in the order of priority.

- 2.1 SOURCE OF MATERIALS FOR USE IN THE PREPARATION OF OUTLINE SPECIFICATIONS
- 2.1.1 Specifications List In Order Of Priority
 - A. HQUSACE/OCE Guide Specifications
 - B. Sacramento District Instructions to each Guide Specification
 - C. District Prepared Specifications
 - D. Project Specifications prepared by other Districts
- 2.2 PREPARATION OF OUTLINE SPECIFICATIONS

2.2.1 General

Outline Specifications are based on the basic OCE Guide Specifications and District-Prepared Specifications (as previously indicated).

An example of a (partially) prepared Outline Specification is shown in Appendix Q.

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INSTRUCTIONS
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PART 3 INSTRUCTIONS FOR PREPARATION OF FINAL PROJECT SPECIFICATIONS

3.1 GENERAL

The following material shall be prepared and submitted in accordance with the instructions contained in this chapter:

- a. Cover Sheet (Appendix A)
- b. Bidding Schedule (Appendix B Items 1,2,3, & 4)
- c. List of Drawings (Appendix C)
- d. List of Government Furnished Property (Appendix D)
- e. Eng Form 4288 (Appendix E)
- f. Submittal Master List (Appendix F)
- g. Table of Contents of Technical Specifications Division (Appendix G)
- h. Description of Additive Bid Items (Appendix I)
- i. Final Project Specification (Printed Copy) (Appendix J)
- j. Construction Quality Control Paragraph (Appendix K)
- k. Final Job Specification on a 5 1/4" Floppy Diskette
- 1. Amendment (Appendix L Items 1,2,3,4,5,6,7, & 8)

(NOTE: All marked-up guides shall accompany the corresponding typed masters in all transmittals.)

3.2 BIDDING SCHEDULES

Appendix B Items 1 through 4 show examples of Bidding Schedules. Contracts can be prepared on a lump sum or unit price basis and can have additional work established as additive items or base bid work deleted by the use of deductive items. All project specifications must contain a bidding schedule.

3.2.1 Lump Sum Contracts

Bidding will be on a lump sum basis for most projects (Appendix B Item 1). Some lump sum projects requiring two or more items shall show the "Total Bid" amount on the Bidding Schedule. All Air Force projects of new vertical construction (buildings) require a five-foot line break-out of this type. Projects where grading, paving, and utility items are incidental to structures and the monetary value is small by comparison, will be bid on a lump sum basis. Where bidding is on a lump sum basis, all measurement and payment provisions in each guide specification shall be deleted.

3.2.2 Unit Price Contracts

Bidding will be on a unit price basis where 1) large quantities of work such as grading, paving, outside utilities, or site preparation are involved, 2) quantities cannot be determined in advance of advertising within limits that would permit a lump sum bid without a substantial contingency, 3) quantities may change significantly during construction, or 4) bidders would have to expend unusual effort in making take-off's of quantities. The selection of unit price bid items will be made in accordance with and under the circumstances given above. An example of a unit price bidding schedule is shown in Appendix B Item 2).

Measurement and payment for each item must be precise, clearly written, and without contradictions. The provisions for such measurement and payment shall be included in the technical section pertinent to the particular item of work unless otherwise indicated. In most cases, the provisions are already provided for in the basic Guide Specification where they must be specially written and included.

3.2.3 Additive Items

When funds for a project are not available to cover all the desired features of the work, a base bid item is established for the most desirable features of the work. The other features are then listed as Additive Items in order of priority. Additive Items must be clearly presented and identified in the drawings, or precisely defined in the specifications. Estimated costs for each item must be given close consideration for projects with multiple Additive Items that are awarded in accordance with the following paragraph:

(APR 1968) For purposes of award, the low bidder shall be the conforming responsible bidder offering the low aggregate amount for the first or base bid item, plus (in the order of priority listed in the schedule) those additive bid items providing the most features of the work within the funds determined by the Government to be available before bids are opened. If addition of another bid item in the listed order of priority would make the award exceed such funds transmittals for all bidders, it shall be skipped and the next subsequent additive bid item in a lower amount shall be added if award thereon can be made within such funds. For example, when the amount available is \$100,000 and a bidder's base bid is \$85,000 with four successive additives of \$10,000, \$8,000, \$6,000 and \$4,000, the aggregate amount of the bid, for purposes of award, would be \$99,000 for the base bid plus the first and fourth additives, the second and third additives skipped because each of them would cause the aggregate bid to exceed \$100,000. In any case, all bids shall be evaluated on the basis of the same additive bid items. The listed

order of priority need be followed only for determining the low bidder.

After determination of the low bidder, award in the best interest of the Government may be made on the base bid and any combination of additive bid items for which funds are determined to be available at the time of the award, and on such combination of additive bid items not exceeding the amount offered by any other conforming responsible bidder for the same combination of bid items.

Unless unusual circumstances exist, an additive should never have an estimated cost of less than \$1,000. See Appendix B Item 3 for an example of a bidding schedule with additive items.

3.2.4 Deductive Items

When funds for a family housing project are not available to cover all the desired features of the work, a base bid item is established containing all possible features of the work. Features that can be deleted are listed as deductive items in reverse order of priority (the least needed item to be deducted first, the most needed item to be deducted last). DEDUCTIVE ITEMS ARE TO BE USED FOR FAMILY HOUSING PROJECTS ONLY. Deductive features must be clearly presented and identified in the drawings, or precisely defined in the specifications (See Appendix B Item 4). Estimated costs for each item should be given close consideration for projects with multiple Deductive Items that are awarded in accordance with the following paragraph:

(APR. 1968) For purposes of award, the low bidder shall be the conforming responsible bidder offering the aggregate amount for the first or base bid item, plus (in the order of priority listed in the schedule) those deductive bid items providing the most features of the work within the funds determined by the Government to be available before bids are opened. If subtraction of a deductive bid item in the listed order of priority would make the award exceed such funds for all bidders, the next subsequent deductive bid item shall also be deducted. For example, when the amount available is \$100,000 and a bidder's base bid and four successive deductives are \$113,000, \$4,000, \$6,000, \$8,000 and \$10,000, the aggregate amount of the bid for purposes of award would be \$95,000 for the base bid minus the first, second, and third deductive items. In any case all bids shall be evaluated on the basis of the same deductive bid items. listed order of priority need be followed only for determining the low bidder. After determination of the low bidder, award in the best interest of the Government may be made according to the base bid and any combination of deductive bids for which funds are determined to be available at the time of the award, provided that award on such combination of bid items does not exceed the amount offered by any other conforming responsible bidder for the same combination of bid items.

Unless unusual circumstances exist, a deductive item should never have an estimated value of less than \$1,000. See Appendix B Item 4 for an example of a bidding schedule including deductive items.

3.3 LIST OF DRAWINGS

The list of drawings shall include all project drawings and standard drawings in the format shown in Appendix C. All drawings shall be listed by exact title together with the district file number and the sequential sheet number.

3.4 LIST OF GOVERNMENT FURNISHED PROPERTY

Government furnished, Contractor installed property together with the approximate cost and the availability of the property to the Contractor, shall be listed on a sheet as shown in Appendix D and shall be included in the Special Clauses as appropriate.

3.5 SUBMITTAL REGISTER

The Submittal Register, ENG Form 4288 (Appendix E) shall be prepared from the Master Listing Of Submittals (See Appendix F) and submitted with the field constructability package (90% design review). In the event that a new guide specification does not appear on the Master Listing of Submittals contact your Corps Project Manager for instructions.

3.5.1 Preparation

The partially completed register (Appendix E) illustrates how submittal items that have been identified during design would appear at the end of the Special Clauses. Columns entitled NAS Activity Code, Item Number, Contractor Schedule Dates and Contractor Action are completed by the Contractor after a Contractor is developed. Columns entitled Classification, Government Action, and Remarks are completed by the Corps of Engineers.

3.6 TABLE OF CONTENTS AND INDICES

The Table of Contents of the Technical Specifications shall begin at the top of the page and shall show the division and section titles and numbers (Appendix G). Divisions not used shall be marked "Not Applicable". The end of the Table of Contents shall be marked by five asterisks (* * * * *) located two spaces below the last line and centered on the page. All pages shall be numbered.

3.7 ASSEMBLY AND HANDLING OF GUIDE SPECIFICATIONS

3.7.1 Assembly

Verify that you have the latest version available of the guide specifications. The <u>project specification number</u> must appear in the upper right corner of each page. The project number is available from your Corps Project Manager.

3.7.2 Handling

Upon assembly of all guide specifications, review the data in each one with particular emphasis on SACRAMENTO DISTRICT NOTES located at the end of the guide. (Some guides may not contain Sacramento District Notes). Check Technical Manuals (TM's) and other materials referenced and distribute pertinent guide specifications to applicable consultants.

3.8 PREPARATION OF TECHNICAL SPECIFICATION SECTIONS

The District will make guide specifications available for each project on the electronic bulletin board, SPKSPECS, for the designer to use in the preparation of each technical specification section. The Technical Specification Sections will be prepared from, and shall be consistent with, the approved Outline Specifications. Reference ER 1110-345-720 (Appendix H) for further information on policies and procedures for the preparation of the technical provisions of specifications for military construction.

3.8.1 Titles and Section Numbers

Titles and Section Numbers included in the Outline Specifications shall be submitted to the Corps Project Manager for approval. If no outline specifications are required, the guide specification titles and section numbers of the edited guides shall be used.

3.8.2 Editing of Guide Specifications

All material not part of the final specification shall be marked out. Paragraphs shall be renumbered when necessary but shall always be renumbered in the format (i.e. 1, 1.1, 1.1.1, 2, 2.1, 2.1.1, etc.) consistent with the latest guide specifications.

3.8.3 Applicable Publications

The applicable publications paragraph at the beginning of each guide specification shall be edited with the text. Only those publications referenced in the proceeding text should remain.

3.8.4 Trade Names and Proprietary Items

As a general policy, the use of trade names, proprietary items, and the drafting of a specification by adopting a manufacturer's description of a particular commercial article shall be avoided. When it is necessary to specify materials or equipment not in the guide specification, minimum requirements will be stated in terms of physical characteristics, chemical composition, laboratory test results, performance in actual use, etc., in such a manner as to ensure full and free competition. For clarification use trade name(s) qualified by specific identification such as manufacturer's model number(s) or catalog number(s) and further qualified with the words "or approved equal" only when absolutely necessary. Where practicable, it is best to state criteria to be used for determining whether an "equal" proposed by a Contractor will be approved, such as strength, capacity, size, etc. Proprietary materials, systems, and processes will not be employed to the exclusion of other materials, systems, and processes, or in ways that might be restrictive.

When an article is specified by general characteristics or performance, at least two and preferably three or more brand name descriptions shall be furnished.

When it is necessary to <u>exclusively</u> specify or employ a proprietary material, system, or process, a report of each instance will be submitted promptly by the Architectural-Engineer. The report shall state all the facts pertaining to the matter and the justification for the need to use a particular system or process. In addition, the specifications shall contain a statement similar to the following: "The allowance for substitution of an approved equal, as stated in CONTRACT CLAUSES paragraph MATERIAL AND WORKMANSHIP, is not applicable to this item; only the stated manufacturer and model number is acceptable."

3.8.5 Construction Contract

The Construction Contract used by the Corps of Engineers is a two party contract. The only parties involved are the Contractor and Contracting Officer. Whenever the terms "Contractor" or "Contracting Officer" are used in the specifications they must be capitalized. <u>Do not refer to any third party (i.e. "others", "Owner", "Engineer", "Electrical Subcontractor" or other subcontractors).</u>

3.8.6 Warranty Clause

A one year warranty clause will be included by the Sacramento District in Division 1 of the Technical Specifications. Several guides contain guarantee clauses which require extended warranties. The clauses will be retained but none shall be added to guides that do not now contain them now. When a section is to be Architect-Engineer prepared, a special guarantee or warranty clause shall not be used unless the material or equipment is of a special design where the interest of the Government clearly requires such a clause.

3.8.7 Architectural-Engineer Prepared Sections

When special subject matter cannot be found in the existing guide specifications, it must be included with an existing guide or be written up as a new section. An Architect-Engineer prepared section shall follow the format of the most recent guide and state precisely what is expected from the Contractor in clearly worded statements. Vague statements are to be avoided (i.e. "to the satisfaction of the Contracting Officer", "in a neat and workmanlike manner", "good working order", or "tests will be made unless waived"). Carefully coordinate the text with the drawings to prevent conflicts.

General correlation between drawings and specifications is a significant part of the coordination job. The scheduling of the work must allow time and personnel to:

- O Check the specifications to assure that statements such as "indicated" or "unless otherwise indicated" are followed up in the specifications or the drawings. Delete unnecessary statements.
- o Verify that the terminology used on the drawings is the same as that used in the specifications. In the case of a conflict, change the drawings to match the specifications.
- o Coordinate and cross-check the drawings and specifications prepared by subcontractors into the balance of the work.
- o Physically assemble for proofreading of specifications and crosschecking of all drawings and specifications prior to reproduction and submittal to the District Office.

3.8.8 Government Property

Government property as referred to in military construction contracts will be classified in the categories specified below and the specifications will be prepared as follows:

3.8.9 Specification Number

The specification number, unique to the project, should be obtained from the Project Manager and placed in the upper right corner of each page. Do not enclose the specification number in parenthesis.

3.8.10 Paper and Font

Project specification documents shall be prepared on 8-1/2" x 11" (20-lb.) bond paper. Font shall be elite (12 pitch).

3.8.11 Floppy Disks

Floppy diskette(s) (5 1/4", double sided, double density) shall accompany electronically prepared Final Job Specifications along with the marked-up printed copies. Modifications to the guide specifications shall be clearly shown on the diskette(s). A word processing program that provides attributes such as "redline" and/or "strike-over" is preferred, however, any method that will show modifications clearly and concisely shall be acceptable.

INSTRUCTIONS FOR PREPARATION OF AMENDMENTS





COVER SHEET



PART 4 INSTRUCTIONS FOR PREPARATION OF AMENDMENTS

4.1 GENERAL

The following material shall be prepared and submitted in accordance with the instructions contained in this chapter and Appendices A through O.

Specification modifications shall be marked or noted so that changes will be easily recognized. It is important to include only the pages that are changed. Architectural-Engineer will only prepare changes to the Technical Specifications. Cover Sheet and other revisions will be handled by the Sacramento District. Note indicating Enclosure Number and Amendment shall be placed in the lower right corner of each page. (Appendix L Items 1-8.) Specification changes are generally Enclosure 1. New and Revised Sections are not. If unsure of enclosure number leave blank space or check with Project Manager. (See Appendix L). Modifications shall be returned to project Manager at least 15 days before Bid Opening Date.

4.1.1 Sequence of Pages

Inserts (added text) that runs over the page or require a new page that is not the end of a section shall be prepared as follows:

Page number will remain the same and a hyphen followed by a lower case letter shall be added to each additional page in alphabetical order. Following pages that have not been changed shall not be included in Amendment. (See Appendix L Item 4).

A note will be added below the page number of the page that precedes pages that are added. (See Appendix Item 6).

Deletions (removed text) that will eliminate one or more pages shall be prepared as follows:

Page numbers following deleted page or pages shall remain the same and not be included in Amendment if they have not been changed. (See Appendix L).

A note will be added below the last page number before deleted pages occur. (See Appendix L).

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4.1.2 Paragraph Sequence

Paragraph numbering will be handled in the same manner as page numbering. (See Appendix L).

4.1.3 Multiple Amendments to Project

Projects having two or more modifications should only have the latest modifications noted or marked. Text from previous Amendments will remain the same and asterisks or other methods of notation will be removed.

4.2 PREPARATION OF ELECTRONICALLY PREPARED AMENDMENTS

4.2.1 Modifications

Modifications shall be made in a manner that will exhibit all changes. It is not necessary to use asterisks. Use of a word processing system with "Redline" and "Strike-Out" capabilities is preferable. New or revised sections shall be prepared in the same manner. (See Appendix L).

* * * * * *

U.S. ARMY ENGINEER DISTRICT

CORPS OF ENGINEERS

SACRAMENTO, CALIFORNIA

SPECIFICATION NO.

PROJECT TITLE

(Base or County and State)



BIDDING SCHEDULE



BIDDING SCHEDULE

Item No.	Description		Amoun	
1.	Barracks Modernization,	Complete	\$	

NOTE: Bidders shall insert either figures or words, but not both.

BIDDING SCHEDULE

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
1.	Demolition	1	Job	LS	\$
2.	Excavation	50,280	CY	\$	\$
3.	Compact Subgrade	167,517	SY .	\$	\$
4.	P.C. Concrete	88,447	CY	\$	\$
5.	Portland Cement	24,096	Ton	\$	\$
6.	Tie Down Anchors	14	Ea	\$	\$
7.	Electrical Work	1	Job	Lump Sum	\$

Bids must be submitted on all individual items of this bidding schedule; otherwise, the bids for this bidding schedule will be considered nonresponsive and will be rejected.

If a modification to a bid based on unit price is submitted, which provides for a lump sum adjustment to the total estimated cost, the application of the lump sum adjustment to each unit price in the bid schedule must be stated. If it is not stated, the bidder agrees that the lump sum adjustment shall be applied on a pro rata basis to every unit price in the bid schedule.

All extensions of the unit prices shown will be subject to verification by the Government. In case of variation between the unit price and extension, the unit price will be considered to be the bid.

If a bid or modification to a bid is submitted and provides for a lump sum adjustment to the total bid, the application of the lump sum adjustment to each item in the bidding schedule must be stated, or if it is not stated, the bidder agrees that the lump sum adjustment shall be applied on a pro rata basis to every item in the bidding schedule.

Spec. No.

BIDDING SCHEDULE

BASE BID ITEMS

Item No.	Description	Amount
1.	Landing Gear Overhaul Facility, Complete to the 5 foot Building Line, except for Additive Items below.	\$
2.	Site Work and Utilities outside the 5 foot Building Line, except for Additive Items below.	\$
	TOTAL BASE BID	\$

ADDITIVE ITEMS

The bidder shall state in the places provided below the amounts that will be added to the Total Base Bid for the Additive Items listed, if it is decided to add any one, all of them or a combination of them to the Total Base Bid in the award of the contract. For determination of low bidder see paragraph titled ADDITIVE ITEMS in the Instructions to Bidders. (See Section 01010 for description of Additive Items.)

Additive Item No.	Description	Amount
A1.	Parking Area and Driveway	\$
A2.	Pedestrian Underpass	\$
A3.	Insulation of Precast Concrete	\$
A4.	LP Gas Standby System	\$
A5.	Sprinkling and Landscaping	\$

A bid on the above schedule must include a total price for the basic schedule together with a price for each item listed therein and a price for each of the additives listed under the additive schedule. Failure to do so will cause the bid to be considered nonresponsive.

(Spec. No.)

BIDDING SCHEDULE

BASE BID ITEM

Item No.	Description		Amount
1.	Improvements to Family Housing,	Complete	
		BASE BID	\$

DEDUCTIVE ITEMS

The bidder shall state in the places provided below the amounts that will be deducted from the Base Bid for the Deductive Items listed, if it is decided to deduct any one, all of them or a combination of them of them from the Base Bid in the award of the contract. For determination of low bidder see paragraph titled ADDITIVE ITEMS in the Instructions to Bidders. (See Section 01010 for description of Deductive Items.)

Deductive Item No.	Description	Amount
D1.	Reroofing of Existing Roofs	\$
D2.	Landscaping	\$
D3.	Furnishing and Installing New Vanity in Bath 2	\$
D4.	Furnishing and Installing New Vanity	\$

A bid on the above schedule must include a price for the basic schedule and a price for each of the deductives listed under the deductive schedule. Failure to do so will cause the bid to be considered nonresponsive.

If a bid or modification to a bid is submitted and provides for a lump sum adjustment to the total bid, the application of the lump sum adjustment to each item in the bidding schedule must be stated, or if it is not stated, the bidder agrees that the lump sum adjustment shall be applied on a pro rata basis to every item in the bidding schedule.



APPENDIX C

LIST OF DRAWINGS



LIST OF DRAWINGS

Description	<u>S</u> ì	<u>eet No.</u>	Rev. No.
Sį	pec. No, File No.	118-25-1040	
Plot Plan and Grade Sec Floor Plans Elevations Sections Schedules and Details Window, Door, and Louve Foundation Plan Roof Framing Plan Wall and Framing Section Trusses and Details Sections and Reinforcin	er Details on	1 2 3 4 5 6 7 8 9 10	

STANDARD DRAWINGS

**To Be Inserted by Sacramento District)

(Attached to SECTION: FENCE, CHAIN LINK)

**Dwg. No. 40-16-08

Fence and Details

(Attached to SECTION: ELECTRICAL WORK, INTERIOR)

Dwg. No. 40-06-04

Sheets 1, 2, 10, 30, and 31

NOTE: For Standard Drawing list, use sheets that are listed in SECTION: ELECTRICAL WORK, INTERIOR, paragraph LAMPS AND LIGHTING FIXTURES.

APPENDIX D

LIST OF GOVERNMENT FURNISHED PROPERTY



List of Property to be furnished by the Government and Installed by the Contractor

Quantity	Description
3	Roof vent fans, Model BE3-18c, 2250 CFM @ 1/2° SP HP, 440/3/60 with automatic damper, bird screen, fire safety switch and thermal overload protection in motor windings.
3	Thermostats to control above fans.
3	Motor starters for above fans.
2	Circulating Pumps Cat. No. BC-7-2, 2-1/2* Flanged 440/3/60.
8	Single seated valve V 5011 A 12451 (D.A.) 1-1/4 pipe size.
4	Pneumatic valve actuator, (D.A.) MP953C 1026-2 without positioning relay spring range 4 to 11 psi.
	The cost of the Government-Furnished Property is estimated to be approximately \$
NOTE: Th	ne property is available at

NOTE TO SPEC WRITER: Gove

Government-Furnished/Contractor-Installed property is material or equipment furnished to the Contractor without cost and will be made available at a specified location.



APPENDEZ E

ENG FORM 4288



			SUBMITTAL REGISTER								\sim	NTRACT NUM	ABER.							
ITLE AND	LOCATION										CO	NTRACTOR					· · ·			SPECIFICATION SECTION
							SUB			CI FK	ASSI-		CONTRAC SCHEDULE (TOR DATES	,	CONTRACT	TOR	GOVEF AC	RNMENT TION	
NAS ACTIVITY CODE	MBTI RBBMUN	SPECIFICATION PARAGRAPH NUMBER	DESCRIPTION OF ITEM SUBMITTED	ω±0€ 0≷0	SAMP ANTEE	MFGS DATA	CERT-F-CATE	THUTZ-CAL DATA	SOFTWARE	- NEORMAT-ON	GOVERNMENT	SUBMIT	APPROVAL NEEDEO BY	MATERIAL NEEDED BY	CODE	DATE	SUBMIT TO GOVERN- MENT	CODE	DATE	: REMARKS
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			Section 01430	Ц	\perp	Ц		Ц			<u> </u>		•		<u></u>				J	
		04.	Environmental Protection						x											
		09.	Restoration Plan						Х	-										
			Section 02050				\perp													
		01.	Procedures for Salvage and demolition work		-		+	$\left \cdot \right $	Х	-	-									
		:	Section 02201						1											
		07.	Capillary Water Barrier				x			1									į	
_		08.	Labeling Information			Х	$oxed{1}$		-											
	· · · · · ·		Section 02210						\perp									_		
		04.	Field Testing		+		х	H	+		-									
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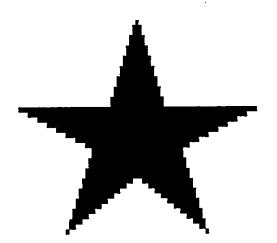
ENG FORM 4288, Aug 89

(Proponent, CEMP-CE)



APPENDIEZ IF

MASTER LISTING OF SUBMITTALS



****** MASTER	LISTING OF SUBMITTA	LS ********
<pre>C = Certificate</pre>	S	= Sample
G = Guarantee	SD	= Shop Drawings
<pre>M = Manufacturer's Data</pre>		= Test Report
0 = Other as Noted	*	= If Applicable
*********	*******	********

*			
GUIDE SPEC NUMBER	PARAGRAPH NUMBER	DESCRIPTION OF MATERIAL	TYPE OF SUBMITTAL
			.
	DIVISIO	N 1 - GENERAL REQUIREMENTS	
SC's	Me	echanical Room Layout Drawings	0
CW-01430 CW-01430	I	nvironmental Protection Plan dentification of Land Resources be Preserved	0
	DI	VISION 2 - SITE WORK	
CE-1305.01 CE-1305.02		rillers Log and Core Samples rillers Log and Core Samples	s, o s, o
CE-1307 CE-1307 CE-1307	S	elief Well and Pump Test Logs nop Drawings ell Screen	O SD S
CE-1308 CE-1308 CE-1308	Se	tone Protection Materials ervice Record for Stone eight Certificates for Stone	s o c
CE-1309 CE-1309 CE-1309	Se Pi	orrow Area Source ettlement Measurements lans for Use of Existing evee or Embankment Materials	s, o o o
CE-2205.01a		urbine Water Flow Measuring quipment	M
CE-2205.01a		actory Tests	T
CEGS-02081 CEGS-02081 CEGS-02081 CEGS-02081	St Pe	egulations tate and Local Licenses ermits otification	C O O

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*******	******	********	******

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*	SPECIFICATIO	N	
GUIDE SPEC	PARAGRAPH	DESCRIPTION OF	TYPE OF
NUMBER	NUMBER	MATERIAL	SURMITETAL
CEGS-02081		Preconstruction Meeting	0
CEGS-02081		Material Inventory	0
CEGS-02081		Abatement Plan	0
CEGS-02081		Fiber Results	0
CEGS-02081		Training	С
CEGS-02081		Waste Plan	0
CEGS-02082		Regulations	С
CEGS-02082		State and Local Licenses	0
CEGS-02082		Permits	0
CEGS-02082		Notification	0
CEGS-02082		Preconstruction Meeting	0
CEGS-02082		Material Inventory	0
CEGS-02082		Abatement Plan	0
CEGS-02082		Fiber Results	0
CEGS-02082		Training	С
CEGS-02082		Waste Plan	0
CEGS-02083		Regulations	0
CEGS-02083		State and Local Licenses	0
CEGS-02083		Permits	0
CEGS-02083		Notification	0
CEGS-02083		Asbestos Material	0
CEGS-02083		Fiber Results	0
CEGS-02083	•	Training	C
CEGS-02201	•	Capillary Water Barrier	T
CEGS-02222		Density Tests	T
CEGS-02225		Blasting Plan	0
CEGS-02225		Physical Test	С, Т
CEGS-02232		Test Results	T

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	* SPECIFICATI	ON	
GUIDE SPEC	PARAGRAPH	DESCRIPTION OF	TYPE OF
NUMBER	NUMBER	MATERIAL	SUBMITTAL
CEGS-02232		Material Source	0
CEGS-02233		Test Results	T
CEGS-02233		Waybills and Delivery Tickets	0
CEGS-02234		Tests Results	T
CEGS-02234		Waybills and Delivery Tickets	0
CEGS-02235		Material Test	Т
CEGS-02335		Density Tests	${f T}$
CEGS-02235		Test Results	$ar{ extbf{T}}$
CEGS-02235		Waybills and Delivery Tickets	Ō
		-	_
CEGS-02236		Test Results	T
CEGS-02236		Test Results from Samples	T
CEGS-02238		Test Results	T
CEGS-02238		Density Test/Calibration Data	${f T}$
CEGS-02238		Sample Test Results	T
CEGS-02238		Sample Test Results	T
CEGS-02238		Mix Design	0
CEGS-02238		Waybills and Delivery Tickets	0
CEGS-02239		Test Results	T
CEGS-02239		Bituminous Materials	С
CEGS-02239		Sample Test Results	${f T}$
CEGS-02239		Mix Design	0
CEGS-02240		Test Results	T
CEGS-02240		Density Test/Calibration Data	T
CEGS-02240		Mix Design	0
CEGS-02240		Waybills and Delivery Tickets	0
CEGS-02241		Test Results	T

******** M	ASTER LISTING OF	F SUBMITTALS	******
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G = Guarantee		SD =	Shop Drawings
M = Manufacturer's Da	ta	T =	Test Report
<pre>0 = Other as Noted</pre>		* =	If Applicable

GUIDE SPEC	PARAGRAPH	DESCRIPTION OF	TYPE OF
NUMBER	NUMBER	MATERIAL	SUBMITITAL
CEGS-02241		Density Test/Calibration Data	T
CEGS-02241		Waybills and Delivery Tickets	0
CEGS-02241		Notification of Aggregate	0
		Selection	
CEGS-02242		Aggregates	S, T
CEGS-02242		Waybills and Delivery Tickets	0
CEGS-02242		Aggregates	S, T, O
CEGS-02242		Bituminous Materials	T
CEGS-02360		Detail Drawings	SD
CEGS-02360		Pile Driving Equipment	0
		Description	_
CEGS-02360		Record of Driven Piles	Т, О
CEGS-02360		Mill Test Reports	Ċ,
CEGS-02360		Test Pile Report	T
CEGS-02360		Load Test Report	T
		-	
CEGS-02361		Shop Drawings	SD
CEGS-02361		Pressure Treated Piles	С
CEGS-02361		Untreated Piles	С
CEGS-02361		Preservative Treatment	С
CEGS-02361		Preservative Treatment	С
CEGS-02361		Load Tests	${f T}$
CEGS-02361		Records of Driven Piles	0
CEGS-02362		Shop Drawings	SD
CEGS-02362		Equipment Description	o o
CEGS-02362		Records of Driven Piles	Ö
CEGS-02362		Methods and Details of Curing	ŏ
CEGS-02362		Load Test	Ť
CEGS-02362		Strength Test	Ť
		www.ca.ag was a work	•
CEGS-02363		Shop Drawings	SD
CEGS-02363		Records of Driven Piles	0

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±	SPECIFICATIO	N	
GUIDE SPEC	PARAGRAPH	DESCRIPTION OF	TYPE OF
NUMBER	NUMBER	MATERIAL	SUBMITTAL
CEGS-02363		Equipment Description	0
CEGS-02363	1	Load Test	T
CEGS-02363		Evidence of Pile Driving Experience	0
CEGS-02365	:	Shop Drawings	SD
CEGS-02365		Records of Driven Piles	0
CEGS-02365	•	Mest Pile Reports	${f T}$
CEGS-02365		Collars or Bands	M
CEGS-02365	1	Metal Shoes	M
CEGS-02365	1	Welder Qualifications	С
CEGS-02366		Shop Drawings	SD
CEGS-02366]	Records of Driven Piles	0
CEGS-02366	į	Nest Pile Report	T
CEGS-02371		Evidence of Pile Driving Experience	. 0
CEGS-02371		Shop Drawings	SD
CEGS-02371		Records of Placed Piles	T, O
CEGS-02371	C	Grouting Procedures	oʻ
CEGS-02383		Evidence of Experience	. 0
CEGS-02383		Survey of Caisson Locations	С
CEGS-02383		Records of Caissons	0
CEGS-02383		Reinforcing Steel	С, О
CEGS-02383		Welding	С, О
CEGS-02383	_	Penetration Tests	${f T}$
CEGS-02383	I	oad Tests	T
CEGS-02450		Rails, Ties and Accessories	C
CEGS-02450	F	Ballast	T
SPK-2490	I	Planted Stock	G

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•	GUIDE SPEC NUMBER	SPECIFICATIO PARAGRAPH NUMBER	N DESCRIPTION OF MATERIAL	TYPE OF SUBMITERI
	CEGS-02511 CEGS-02511		Test Reports Delivery Tickets	T C

****** MASTER	LISTING OF	SUBMITTALS	******
C = Certificate		S =	Sample
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<pre>M = Manufacturer's Data</pre>			Test Report
O = Other as Noted		* =	If Applicable
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*	SPECIFICATIO	IN	
GUIDE SPEC	PARAGRAPH	DESCRIPTION OF	TYPE OF
NUMBER	NUMBER	MATERIAL	SUBMITTIAL
SPD-02513		Aggregate	o
SPD-02513		Job Mix Formula	ŏ
SPD-02513		Pavement	Š
CEGS-02515		Aggregate	S
CEGS-02515		Materials for Mixture Studies	S
CEGS-02515		Aggregate	S
CEGS-02515		Epoxy Resin Material	С, Т
CEGS-02515		Batch Plant Data and Details	0, 1
CEGS-02515		Mixer Details	Ö
CEGS-02515		Hauling Equipment Data	Ö
CEGS-02515		Placing Equipment Data	Ö
		and Methods	ŏ
CEGS-02515		Proposed Supporting Method	Ŏ
CEGS-02515		Curing Media, Data and	M, O
		Methods	,
CEGS-02515	1	Cold Weather Protection Methods	0
CEGS-02515		Hot Weather Protection Methods	0
CEGS-02515	!	CQC Reports	Т, О
CEGS-02515		Aggregate Sources, Mix Design,	T, O
	1	Tests	
CEGS-02530		Drainage Filter Course	T
CEGS-02530		Stone Foundation	${f T}$
CEGS-02530		Clay Foundation	${f T}$.
CEGS-02530		Wearing Course	S
CEGS-02530		Bituminous Mix Formula	0
CEGS-02530	:	Mixing Plant Data	0
CEGS-02551	,	Waybills and Delivery Tickets	0
CEGS-02552		Test Results	T
CEGS-02552		Waybills and Delivery Tickets	0
CEGS-02552	•	Job Mix Formula	0

*******	MASTER	LISTING	OF	SUBMIT	ĽAJ	s	*******
C = Certificate				5	5	=	Sample
G ≈ Guarantee				5	SD	=	Shop Drawings
M = Manufacturer's	Data						Test Report
0 = Other as Noted						=	If Applicable
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[* NOTE: Specification paragraph number will be inserted by A-E]

* SPECIFICAT	ION	
GUIDE SPEC PARAGRAP	H DESCRIPTION OF	TYPE OF
NUMBER NUMBER	MATERIAL	SUPMITUAL.
CEGS-02554	Test Results	T
CEGS-02554	Wearing Course	S, T
CEGS-02554	Waybills and Delivery Tickets	0
CEGS-02554	Job Mix Formula	0
CEGS-02555	Test Results	т
CEGS-02555	Waybills and Delivery Tickets	0
CEGS-02556	Aggregates	S
CEGS-02556	Aggregates	S
CEGS-02556	Bituminous Materials	S
CEGS-02556	Waybills and Delivery Tickets	0
CEGS-02256	Mix Design Materials	S
CEGS-02557	Aggregates	S
CEGS-02557	Aggregates	S
CEGS-02557	Bituminous Materials	. S
CEGS-02557	Waybills and Delivery Tickets	0
CEGS-02557	Mix Design Materials	S
CEGS-02558	Bituminous Material	S
CEGS-02558	Bituminous Material	S
CEGS-02558	Waybills and Delivery Tickets	0
CEGS-02558	Temperature Viscosity	0
	Relationship	
CEGS-02559	Bituminous Material	S
CEGS-02559	Bituminous Material	C, T
CEGS-02559	Calibration Test Results	T
CEGS-02559	Waybills and Delivery Tickets	0
CEGS-02559	Temperature Viscosity	0
	Relationship	
CEGS-02560	Aggregate	s
CEGS-02560	Materials Test Results	${f T}$

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* SPECIFICATION					
GUIDE SPEC	PARAGRAPH		TYPE		
NUMBER	NOMBER	MATERIAL	SUBMIT	<u> </u>	
CEGS-02560		Calibration Test Results	Ţ		
CEGS-02560		Waybills and Delivery Tickets	ō		
CEGS-02560		Aggregate Gradation Limits	T		
CEGS-02560		Temperature Viscosity	0		
CEGS-02561		Testing	С		
CEGS-02561		Calibration Test	T		
~~~~ ^~~		3			
CEGS-02562		Aggregates	S		
CEGS-02562 CEGS-02562		Aggregates Bituminous Materials	S		
CEGS-02562		Materials for Design Mix	s s		
CEGS-02302		materials for besign mix	5		
CEGS-02563		Waybills and Delivery Tickets	0		
CEGS-02563		Materials	Š		
CEGS-02563		Materials	Ċ		
CEGS-02564		Bituminous Materials	M		
CEGS-02577		Paint/Reflective Media	s,	T	
amaa 00570		Mire Donisma			
CEGS-02579 CEGS-02579		Mix Designs Test Reports	S T		
CEGS-02579		Materials	C		
CEGS=02519		racel Mis	C		
CEGS-02580		Cold Applied Sealant Equipment	M.	C	
CEGS-02580		Source of Sealants	o'	_	
CEGS-02580		Test Results/Recommendations	M,	С, Т	
CEGS-02580		Storage Facilities	M	·	
CEGS-02580		Primers	M		
CEGS-02580		Cold-Applied Sealant	M		
CEGS-02580		Primer Application	M		
araa aara:		Gold harlind Conlant Baringer		0	
CEGS-02581		Cold-Applied Sealant Equipment	M,	. С	

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GUIDE SPEC	PARAGRAPH	DESCRIPTION OF	TYPE OF
NUMBER	NOMBER	MATERIAL	SUBMITTAL
CEGS-02581		Source of Sealants, Test for Primer Band	т, о
CEGS-02581		Test Results, Installation Procedures	M, T
CEGS-02581		Storage Facilities	M
CEGS-02581		Cold-applied Sealant	M
CEGS-02581		Primer Application	M
CEGS-02593		Test Report	т, с
CEGS-02597		Bituminous Materials/Recycling	S, T
SPK-02611		Cement	С
CEGS-02660		Material and Installation	SD, M
CEGS-02660		Pipe, Pipe Fittings, Valves, Hydrants, Hose Houses, Meters	M
CEGS-02660		Name and Qualification, of the Manufacturer's Representative	0
CEGS-02660		Certification of Final Installation	С
CEGS-02660		Method for Disposal of Waste Test Water	0
CEGS-02685		Shop Drawings	SD
CEGS-02685		Instructions	M
CEGS-02670		Drilling Plan	0
CEGS-02670		Logs of Wells	Ö
CEGS-02670		Test Reports	Ť
CEGS-02670		Permits	õ
CEGS-02670		Notification of Local	ŏ
C1X3D-02070		Authorities	

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GUIDE SPEC	* SPECIFICATION PARAGRAPH NUMBER		TYPE SUBM	
CEGS-02710	•	Filter Fabric, Pipe, Pipe Fittings	S	
CEGS-02710		Filter Fabric	C	
CEGS-02711 CEGS-02711		Materials Certifications Pipe and Fitting	C S	
CEGS-02730 CEGS-02730		Pipings and Fittings, etc Frame(s) and Cover(s)	M M	
CEGS-02732 CEGS-02732		Tests Sample Tests	T	, T
CEGS-02751 CEGS-02751		ASME Compliance List of Materials and Equipment		, o , o
CEGS-02751 CEGS-02751		Shop Drawings Ejector Capacity/Installation	S M	D , T, O
CEGS-02752		List of Materials and Equipment	М	, 0
CEGS-02752		Shop Drawings	S	D
CEGS-02831 CEGS-02831		Shop Drawings Materials	S	_
CEGS-02835		Field Operation Performance History	0	
CEGS-02835 CEGS-02835		Shop Drawings Test Reports	S: T	
CW-02212		Vibratory Rollers	0	
CW-02215		Filter Fabric	s	

*************	MASTER	LISTING	OF	SUBMITTAL	S	******
C = Certificate				S	=	Sample
G = Guarantee				SD	=	Shop Drawings
<pre>M = Manufacturer's  </pre>	Data			${f T}$	=	Test Report
0 = Other as Noted				*	=	If Applicable
************	*****	*****		******	-	

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#### [* NOTE: Specification paragraph number will be inserted by A-E]

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	*	SPECIFICATION	ON CON		
	GUIDE SPEC	PARAGRAPH	DESCRIPTION OF	TY	PE OF
	NUMBER	NUMBER	MATERIAL	SUB	MITTAL
-				<del></del>	<del></del>
	CW-02215		Filter Fabric and Seams		C, 0
	CW-02311		Equipment Descriptions Record of Driven Piles		0
	CW-02311		Splice Design		т, о
	CW-02311		Preservative Treatment		O C, T
	CW-02311		Test Piles		•
	CW-02311				T O
	CW-02311		Record of Driven Piles		U
	CW-02315		Equipment Descriptions		0
	CW-02315		Record of Driven Piles		т, О
	CW-02315		Steel-Mill Test		С, Т
	CW-02315		Test Pile Report		T
	CW-02411		Equipment Descriptions		0
	CW-02411		Shop Drawings		SD
	CW-02411		Test Procedure		0
•	CW-02411		Interlock Gauging		С
	CW-02411		Record of Driven Piles		T, 0
	CW-02541	•	Stone Fill Material		S, T, O
	CW-02541		Gabion Units		C .
			DIVISION 3 - CONCRETE		
	CW-03150		Joint Materials		С, Т
	CW-03150		Sealant and Primer		S
	CW-03150		Waterstop		S
	CEGS-03200		Shop Drawings		SD
	CEGS-03200		Mill Reports		С
	CW-03210		Radiograph Data		T
	CW-03210		Disposition Records		0

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CIFICATION ARACRAPH	DESCRIPTION OF	TYPE OF
NUMBER	MATERIAL	SUBMITTAL
		SD
Mate	rials Test	C, T
Disp	osition Records	0
Equi	oment Descriptions	С, Т, О
Tens	ioning Records	0
Mate	rials	С
Test	Reports	C C
Mate	rials	С
Mix :	Proportions	0
Conc	rete	S, T
Acron	egate	S
		T, O
		M, C, T
=		м, с, т
	shrink Grout	м, с, т
Non-	shrink Grout	M, C, O
Mixt	re Proportions, Non-	С, Т, О
		, ,
Admi	xtures and Curing	M, C
Mate	rials	
Batc	n Plant	0
<del>-</del>	<del></del>	0
		0
		0
		0
		0
_		0
		0
		Т, О
•		S
<del>-</del>	# <del>-</del>	T
Batc	ning Report	0
	ARACRAPH NUMBER  Shop Mater Dispo Equij Tens:  Mater Mix I Conc: Aggre Conc: Cemes Slag Non-: Non-: Mixtu shrii Admi: Mater Batcl Mixer Conve Plac: Joint Curii Cold Hot I Aggre Conc: Test	Shop Drawings Materials Test Disposition Records Equipment Descriptions Tensioning Records  Materials Test Reports Materials Mix Proportions Concrete  Aggregate Concrete Mixture Proportions Cement and Pozzolan

******	MASTER	LISTING	OF	SUBMITTAL	S *******	***
C = Certificate				S	= Sample	
G = Guarantee				SD	= Shop Drawings	
M = Manufacturer's I	Data			${f T}$	= Test Report	
<pre>0 = Other as Noted</pre>				*	= If Applicable	
********	****	*****	***	*****	******	***

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*				
GUIDE SPEC NUMBER	PARAGRAPH NUMBER	DESCRIPTION OF MATERIAL		PE OF
CW-03301		Result of Inspection Prior to Concrete Placement		0
CW-03301		Adjustments to Batch Weights		0
CEGS-03301		Field Test		T
CEGS-03302		Cement		C
CEGS-03302		Reinforcement		C
CEGS-03302		Shop Drawings		SD
CEGS-03362		Cores		T
CW-03305		Aggregates		S
CW-03305		Curing Materials Data		S, 0
CW-03305		Concrete Materials, Pumping		S, M, T
		Equipment		
CW-03305		Cement		T
CW-03305		Pozzolan		T
CW-03305		Non-shrink Grout		м, о
CW-03305		Mixture Proportions		С, Т
CW-03305		Plant Layout Drawings		0
CW-03305		Batch Plant Data		0
CW-03305		Mixer Data		0
CW-03305		Conveying Equipment		0
CW-03305		Joint Clean-up		0
CW-03305		Curing Medium and Methods		0
CW-03305		Cold Weather Curing Methods		0
CW-03305		Hot Weather Curing Methods		0
CW-03305		Non-shrink Grout	•	C, 0
CW-03305		Mix Properties		0
CW-03305		Recorded Chart or Tape		0
CW-03305		Concrete Retarder		S
CW-03305		Construction Report Prior to		0
		Placing Concrete		

****** MASTER	LISTING OF SUBM	ITTALS ******	******
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G = Guarantee		SD = Shop Dra	wings
M = Manufacturer's Data		T = Test Rep	ort
<pre>0 = Other as Noted</pre>		* = If Appli	.cable
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*				
GUIDE SPEC	PARAGRAPH	DESCRIPTION OF	TY	PE OF
NUMBER	NUMBER	MATERIAL.	SUB	MITTIAL
CW-03305	(	Construction Reports		т, о
CW-03307	•	Cementitious Materials		C
CW-03307	1	Aggregate		T
CW-03307		Admixtures and Curing Materials		M
CW-03307		Mixture Proportions		T, O
CW-03307		QC Report		T, O
OKT 02261		Dank Danal		a
CW-03361 CW-03361		Nest Panel Nement and Pozzolan		S
				M
CW-03361		Aggregates		T
CW-03361		Admixtures and Curing Materials		M
CW-03361	_	lixture Proportions		T, O
CW-03361		Names and Qualifications of		0
		lozzlemen –		-
CW-03362	C	lement Shipment Schedule		т, о
CW-03362		Aggregates .		S
CW-03362		Cement and Pozzolan		M, C, T
CW-03362		rout Mixing Proportions		т, о
CW-03362		Air Entraining Admixture		
CW-03362		Turing Compound		C C
CW-03362		Quipment Data		0
CW-03362		Placement Procedures		0
CW-03362	Ċ	During Medium and Methods		0
CEGS-03414	S	Shop Drawings		SD
CEGS-03420	S	Shop Drawings		SD
CW-03425	Ľ	Design Calculations		0

******* MASTER	LISTING OF SUBMITTAL	S ******
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M = Manufacturer's Data		= Test Report
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	GUIDE SPEC	PARAGRAPH	DESCRIPTION OF	TY	PE OF
_	NUMBER	NUMBER	MATERYAL	SUB	MITTAL
Ī					
	CW-03425		Material Tests		т
	CW-03425		Construction Tests		<b>T</b>
	CW-03425		Cement		M, C
	CW-03425		Pozzolan		M, C
	CW-03425		Air Entraining Admixture		M, C
	CW-03425		Water Reducing Admixture		M, C
	CW-03425		Aggregates		M, C
	CW-03425		Air Content of Concrete		M
	CW-03425		Concrete Mix Proportions		Ö
	CW-03425		Sample Panel		S
	CW-03425		Shop Drawings		SD
	CW-03425		Mix Design		T, 0
	CW-03425		Erection Plan		0
	CH-03423		meetam rim		•
	CEGS-03450		Shop Drawings		SD
	CEGS-03450		Certificates of Compliance		С
	CEGS-03450		Maximum Aggregate		0
			Size/Mix Design		
	CEGS-03450		Concrete		C, T
	CEGS-03450		Precast Units		S
	CEGS-03450		Manufacturer's Qualifications		M
	~~~		a		a m
	CEGS-03510	•	Concrete Design Materials		C, T
	CEGS-03510		materials		SD, S, M, C
					M, C
	CEGS-03550		Shop Drawings		SD
	CEGS-03550		Test Reports		T
			•		
			DIVISION 4 - MASONRY		
	CEGS-04200		Materials		С, Т
	CEGS-04200		Materials		S
	CEGS-04200		Panels		S

A Charles Tolling

****** MASTER	LISTING OF SUBMITTALS	******
C = Certificate	s =	Sample
G = Guarantee	SD =	Shop Drawings
<pre>M = Manufacturer's Data</pre>		Test Report
O = Other as Noted	* =	If Applicable
**********	*****	******

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1	* SPECIFICATION		
GUIDE SPEC	PARAGRAPH	DESCRIPTION OF	TYPE OF
NUMBER	NUMBER	MATERIAL	SUBMITTAL

NOMBER	NUMBER	MATERIAL	SUBMITIAL
		<u>DIVISION 5 - METALS</u>	
CEGS-05055		Welding Qualifications	т, О
CEGS-05055		Procedures Welding Procedure and Records	т, о
CEGS-05055		Welder Qualifications	c'
CEGS-05055		Renewal Qualifications	Č
CEGS-05055		Records of Operations	0
CEGS-05061		Search Unit Angle/Shear Wave Angle	0
CEGS-05061		Personnel Qualifications	С, О
CEGS-05061		Working Standards Details	o ·
CEGS-05061		Reports and Records	T, O
CEGS-05062		Welding Procedures	SD, T, O
CEGS-05062		Changes in Procedures	Т, О
CEGS-05062		Personnel Qualifications	C, O
CEGS-05062		Reports and Records	т, о
CEGS-05120		Test Results and	С, Т, О
05100		Qualifications	
CEGS-05120		Shop Drawings	SD
CEGS-05210		Design and Manufacture of Steel Joists and Girders	C, O
CEGS-05210		Shop Drawings	SD
CEGS-05300		Shop Drawings	SD
CEGS-05300		Design Computations/ Certifications	С, О
SPK-05330		Shop Drawings	SD

****** MASTE	R LISTING OF SUBMITTAL	S ******
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G = Guarantee	SD	= Shop Drawings
<pre>M = Manufacturer's Data</pre>	T	= Test Report
0 = Other as Noted	*	= If Applicable

[* NOTE: Specification paragraph number will be inserted by A-E]

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GUIDE SPEC	PARAGRAPH	DESCRIPTION OF	TY	PE OF
NUMBER	NUMBER	<u>MATERIAL</u>	SUB	MITIAL
05000				_
SPK-05330		Design Computations		0
SPK-05400		Shop Drawings		SD
CEGS-05500		Shop Drawings		SD
CEGS-05500		Materials		S
CW-05501	•	Materials		s
CW-05501		Shop Drawings		SD
CW-05501		List of Materials		C, 0
CW-05501		Schedule of Welding		0
		Procedures		
CW-05501		Material and Welding		C, T
		Requirements		
CW-05501		Disposition Records		0
CW-05501		Flame Cutting		SD
CW-05501		Welding Procedures		0
CW-05501		Patterns		0
CW-05501		Welding Procedures		0
CW-05501		Welder Certification		C
CW-05501		Schedule of Welding		0
		Procedures		
CW-05501		Welding Repair Plans		0
CW-05501		Schedule of Welding		0
		Procedures		
CW-05501		Welding Qualifications		C, T
CW-05501		Stud Welding		C, T
CW-05501		Stud Application		C, T
CW-05501		Computed Weights		SD
CW-05501		Shipping Lists		0
CW05502		Shop Drawings, Samples, Lists		SD, S, C, T
		of Materials, Test Results,		-

****************** MASTER LISTING OF	SURMITTALS **************
C = Certificate	S = Sample
G = Guarantee	SD = Shop Drawings
M = Manufacturer's Data	T = Test Report
0 = Other as Noted	<pre>* = If Applicable</pre>
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* 9	SPECIFICATI	ON CON	
GUIDE SPEC	PARAGRAPH	DESCRIPTION OF	TYPE OF
NUMBER	NUMBER	<u>MATERIAL</u>	SUBMITTAL
		Disposition Records	
CW-05502		Railing Calculations	0
			_
CW-05550		Shop Drawings, Samples, Lists	SD, S,
		1 = 3-,	С, Т
		of Materials, Test Reports,	-, -
CW-05550		Welding Procedures	0
CW-05550		Marking Diagram and	Õ
Cii 02550		Radiographs	O
		Turation of the second of the	
CW-05561		Shop Drawings, Samples, Lists	SD, S,
CH-02301		purp promise, purples, mass	од, о, С, Т
		of Materials, Test Reports,	C, 1
		Welding Procedures,	
		Disposition Records, Diagonals	
		Prestressing Plan and	
OFT OFFC1		Records, CQC Reports	_
CW-05561		Materials Tests	Ţ
CW-05561		Disposition Records	0
CW-05561		Record of Prestressing	T
05-64		Diagonals	
CW-05561		Record of Prestressing	0
		Operations	
CT1 05560		an - 1 - 1 - 1 - 1 - 1	
CW-05562		Shop Drawings, Samples, Lists	SD, S,
			C, T
		of Materials, Materials Test	
		Reports, Welding Procedures,	•
		Disposition Records, CQC	
		Reports	
CW-05562		Materials Test	T
CW-05562		Disposition of Tested	0
		Materials	

************	MASTER	LISTING	OF	SUBMITTAL	S	*****
C = Certificate				S	=	Sample
G = Guarantee				SD	=	Shop Drawings
M = Manufacturer's	Data			${f T}$	=	Test Report
<pre>0 = Other as Noted</pre>				*	=	If Applicable
*********	****	*****	***	*****	**	*****

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GUIDE SPEC	PARAGRAPH	DESCRIPTION OF	TYPE OF
NUMBER	NOMBER	MATERIAL	SUBMITITAL
CW-05563	Sho	op Drawings	SD
CW-05563	San	ples	S
CW05563	Lis	st of Materials	0
CW-05563		erials Test	${f T}$
CW-05563		sposition of Tested Perials	О
CW-05563		estressing Data	Т, О
CW-05563		estressing Technician tification	С
CW-05563	Pre	estressing Record	0
CW-05567		cords of CQC Inspections	0
CW-05567	Sho	op Drawings, Samples,	SD, S, C, T
		erials Tests, Welding cedures, CQC Reports	
CW-05567		erials Tests	${f T}$
CW-05567		erations and Test Results	Т, О
CW-05567		e Assembly	Ğ
CW-05568		cords of CQC Inspection	0
CW-05568	Sho	op Drawings, Samples,	SD, S, C, T
		erials Tests, Welding	·
		cedures, CQC Reports	
CW-05568		erials Tests	T
CW-05568		eration and Test Results	T, 0
CW-05568	Gat	ce Assembly	G
CW-05569		Records	0
CW-05569		p Drawings, Samples,	SD, S, C, T
CW-05569		erials Tests, Welding cedures, CQC Reports	
	FIC	cermes) of reform	

****** MASIEF	R LISTING OF SUBMITTALS	******
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M = Manufacturer's Data		Test Report
O = Other as Noted	* =	If Applicable
**********	********	******

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CW-05569	GUIDE SPEC NUMBER	SPECIFICATION PARAGRAPH NUMBER	DESCRIPTION OF MATERIAL	TYPR OF SUBMITIVAL
CW-05569 Operation and Test Results T, O CW-05569 Gate Assembly G DIVISION 6 - WOOD AND PLASTICS CEGS-06100 Materials S CEGS-06100 Shop Drawings SD CEGS-06200 Shop Drawings SD CEGS-06200 Materials and Accessories S, M SPK-06410 WIC Certifications SPK-06410 Shop Drawings SD DIVISION 7 - THERMAL AND MOISTURE PROTECTION CEGS-07111 Materials C CEGS-07111 Mixing and Application Data M CEGS-07111 Membrane, Sealant, Splicing S Cement CEGS-07111 Shop Drawings SD CEGS-07112 Materials C CEGS-07112 Materials M Mixing and Application Data M Mixing and Application Data M CEGS-07140 Metallic Waterproofing C, T				
DIVISION 6 - WOOD AND PLASTICS CEGS-06100 Materials SD CEGS-06100 Computations for Insulation O CEGS-06200 Shop Drawings SD CEGS-06200 Materials and Accessories S, M SPK-06410 WIC Certifications SPK-06410 Shop Drawings SD Drawings SD DIVISION 7 - THERMAL AND MOISTURE PROTECTION CEGS-07111 Materials C CEGS-07111 Mixing and Application Data Membrane, Sealant, Splicing SD CEGS-07111 Shop Drawings SD CEGS-07111 Shop Drawings SD CEGS-07111 Membrane, Sealant, Splicing SD CEGS-07111 Membrane, Sealant, Splicing SD CEGS-07112 Materials C CEGS-07112 Mixing and Application Data Membrane, Sealant, Mixing and Application Data Membrane, Sealant, Mixing and Application Data Membrane, Membrane, Mixing and Application Data Membrane, Mixing and Application Data Membrane, Membrane, Mixing and Application Data Membrane, Mixing and Application Data Membrane, Membrane, Mixing and Application Data Membrane, Mixing and Application Data Membrane, Mixing and Application Data Membrane, Membrane, Mixing and Application Data Membrane, Mixing Applica	CW-05569	M	aterials Tests	С, Т
DIVISION 6 - WOOD AND PLASTICS CEGS-06100 Materials SD CEGS-06100 Shop Drawings SD CEGS-06100 Computations for Insulation O CEGS-06200 Shop Drawings SD CEGS-06200 Materials and Accessories S, M SPK-06410 WIC Certifications SPK-06410 Shop Drawings SD DIVISION 7 - THERMAL AND MOISTURE PROTECTION CEGS-07111 Materials C CEGS-07111 Mixing and Application Data M Membrane, Sealant, Splicing S Cement CEGS-07111 Shop Drawings SD CEGS-07111 Materials C CEGS-07111 Membrane, Sealant, Splicing S Cement CEGS-07111 Shop Drawings SD CEGS-07112 Materials C CEGS-07112 Materials M Metallic Materials M M Metallic Waterproofing C C, T	CW-05569	0	peration and Test Results	Т, О
CEGS-06100 Materials S CEGS-06100 Shop Drawings SD CEGS-06100 Computations for Insulation O CEGS-06200 Shop Drawings SD CEGS-06200 Materials and Accessories S, M SPK-06410 WIC Certifications SPK-06410 Shop Drawings SD DIVISION 7 - THERMAL AND MOISTURE PROTECTION CEGS-07111 Materials C CEGS-07111 Mixing and Application Data M CEGS-07111 Membrane, Sealant, Splicing S Cement CEGS-07111 Shop Drawings SD CEGS-07112 Materials C CEGS-07112 Materials C CEGS-07112 Materials S CEGS-07112 Materials C CEGS-07112 Materials M CEGS-071140 Mixing and Application Data M M CEGS-07140 Mixing and Application Data M M CEGS-07140 Mixing and Application Data M Metallic Waterproofing C, T	CW-05569	G	ate Assembly	G
CEGS-06100 Materials S CEGS-06100 Shop Drawings SD CEGS-06100 Computations for Insulation O CEGS-06200 Shop Drawings SD CEGS-06200 Materials and Accessories S, M SPK-06410 WIC Certifications SPK-06410 Shop Drawings SD DIVISION 7 - THERMAL AND MOISTURE PROTECTION CEGS-07111 Materials C CEGS-07111 Mixing and Application Data M CEGS-07111 Membrane, Sealant, Splicing S Cement CEGS-07111 Shop Drawings SD CEGS-07112 Materials C CEGS-07112 Materials C CEGS-07112 Materials S CEGS-07112 Materials C CEGS-07112 Materials M CEGS-071140 Mixing and Application Data M M CEGS-07140 Mixing and Application Data M M CEGS-07140 Mixing and Application Data M Metallic Waterproofing C, T		DTVIST	ON 6 - WOOD AND PLASTICS	
CEGS-06100 Shop Drawings SD CEGS-06100 Computations for Insulation 0 CEGS-06200 Shop Drawings SD CEGS-06200 Materials and Accessories S, M SPK-06410 WIC Certifications SPK-06410 Shop Drawings SD DIVISION 7 - THERMAL AND MOISTURE PROTECTION CEGS-07111 Materials C CEGS-07111 Installation Instructions M CEGS-07111 Mixing and Application Data M CEGS-07111 Membrane, Sealant, Splicing S Cement CEGS-07111 Shop Drawings SD CEGS-07112 Materials C CEGS-07112 Materials M M Materials M M M M M M M M M M M M M M M M M M M		<u> </u>	04.0 1000 1110 11111100	
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CEGS-07111 Installation Instructions M CEGS-07111 Mixing and Application Data M CEGS-07111 Membrane, Sealant, Splicing S Cement CEGS-07111 Shop Drawings SD CEGS-07112 Materials C CEGS-07112 Installation Instructions M CEGS-07112 Mixing and Application Data M CEGS-07140 Mixing and Application Data M CEGS-07140 Metallic Waterproofing C, T	CEGS-07111	M	aterials	С
CEGS-07111 Membrane, Sealant, Splicing S Cement CEGS-07111 Shop Drawings SD CEGS-07112 Materials C CEGS-07112 Installation Instructions M CEGS-07112 Mixing and Application Data M CEGS-07140 Mixing and Application Data M CEGS-07140 Metallic Waterproofing C, T		I	nstallation Instructions	_
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CEGS-07140 Metallic Waterproofing C, T	-			
CEGS-07140 Metallic Waterproofing C, T	CFCS_07140	м	ixing and Application Data	м
CEGS-07140 Materials C, O	CEGS-07140		aterials	c, o

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GUIDE SPEC NUMBER	* SPECIFICATION PARAGRAPH NUMBER	DESCRIPTION OF MATERIAL	TYPE OF SUBMITIVAL
CEGS-07160	M	aterials	М
SPK-07220	C	computations	0
SPK-07220	M	aterials	М
SPK-07220	E	itumen	S
SPK-07220	M	anufacturer's Literature	S
SPK-07220	R	eports	0
CEGS-07240	M	lanufacturer's Data	М
CEGS-07240	M	aterials and Accessories	S
CEGS-07240	I	est	${f T}$

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GUIDE SPEC	PARAGRAPH	DESCRIPTION OF	TY	PE OF
NUMBER	NUMBER	MATERIAL	SUB	LATTI
		— — — — — — — — — — — — — — — — — — —		-
CEGS-07250		Materials		s
CEGS-07250		Application		Õ
CEGS-07250		Test Report		Ť
CEGS-07250		Manufacturer's Data		M
CLCD 07200				41
CEGS-07270		Shop Drawings		SD, M,
				C, T
CEGS-07311		Roofing Materials		M
		_		
CEGS-07413		Shop Drawings		SD
CEGS-07413		Panels		S
CEGS-07415		Shop Drawings		SD
CEGS-07415		Panels		C
CEGS-07415		Materials		S
				J
SPK-07416		Shop Drawings		SD
SPK-07416		Calculations		0
SPK-07416		Materials		S
SPK-07416		Guarantee/Warranty		Ğ
CEGS-07510		Bitumen		S
CEGS-07510		Materials		M
CEGS-07510		CQC Procedure		0
CEGS-07530		Materials		С
CEGS-07530		Installation Instructions		ō
CEGS-07530		Membrane, Sealant, Splicing		S
		Cement		1.0
CEGS-07530		Shop Drawings		SD
CEGS-07530		CQC Procedures		0
CEGS-07540		Insulation Calculations		o
		THE CHICAGO CHILD		v

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<pre>M = Manufacturer's </pre>	Data					Test Report
0 = Other as Noted				*	=	If Applicable
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[* NOTE: Specification paragraph number will be inserted by A-E]

* GUIDE SPECNUMBER	SPECIFICATIO PARAGRAPH NUMBER	N DESCRIPTION OF MATERIAL	TYPE SURMI	
CEGS-07540		Materials and System	C	
CEGS-07540 CEGS-07540		Installation Instructions Materials	M S	
CEGS-07550		Computations	0	
CEGS-07550 CEGS-07550		Test Reports Documentations	T O	
CEGS-07555 CEGS-07555		Materials Instructions	С М	
CEGS-07555 CEGS-07555		Shop Drawings Warranty	SI G	
CEGS-07600 CEGS-07600		Materials CQC Procedures	М О	
CEGS-07720		Shop Drawings	SI)
CEGS-07920 CEGS-07920 CEGS-07920		Calking and Sealants Material Calking and Sealants	C M S	
	DIVIS	ION 8 - DOORS AND WINDOWS		
CEGS-08110 CEGS-08110 CEGS-08110	1	Shop Drawings Test Reports Oversized Fire Doors	SI C, C) , T
CEGS-08120 CEGS-08120 CEGS-08120 CEGS-08120 CEGS-08120		Shop Drawings Installation Instructions Coating Test Reports Calculations	SI M S C,	

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	GUIDE SPEC				pe of
_	NUMBER	NUMBER	MATERIAL	SOB	MITTIAL
	CEGS-08201		Shop Drawings		SD
	CEGS-08201		Oversized Fire Doors		С
	CEGS-08201		Natural Finish		С
	CEGS-08312		Shop Drawings		SD
	CEGS-08312		Installation Instructions		M
	CEGS-08312		Oversized Fire Doors		C
	CEGS-08313		Sliding Glass Doors		0
	CEGS-08313		Installation Instructions		M
	CEGS-08313		Shop Drawings		M SD
	CB32-08313		SUDD DISMINGS		טט
	SPK-08316		Shop Drawings		SD
	CEGS-08318		Manufacturer's Data		M, C
	CEGS-08325		Doors and Frames		С
	CEGS-08325		Shop Drawings		SD, M, O
	CEGS-08330		Shop Drawings		SD
	CEGS-08330		Installation Instructions		M
	CEGS-08330		Oversized Fire Doors		C
	CEGS=06330		Oversized Fire Doors		C
	CEGS-08331		Shop Drawings		SD
	CEGS-08331		Installation Instructions		M
	CEGS-08353		Shop Drawings, Color Chart		SD, M, O
	CEGS-08353		Materials		0
	CEGS-08360		Shop Drawings		SD
	CEGS-08360		Installation Instructions		M
	-00000				••
	CEGS-08365		Shop Drawings		SD
	CEGS-08365		Installation Instructions		M

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GUIDE SPEC	PARACRAPH	DESCRIPTION OF	TY	PE OF
NUMBER	NUMBER	MATERIAL	SUB	MTTTAL.
CEGS-08510		Shop Drawings		SD, O
CEGS-08510		Prime Windows		С
CEGS-08520		Shop Drawings		SD, O
CEGS-08520		Prime and Storm Windows		c ·
CEGS-08520		Installation Instructions		M
CEGS-08521		Shop Drawings		SD
CEGS-08521		Performance/Testing		С, Т
cmaa 00610		Char President		7 70 0
CEGS-08610		Shop Drawings		SD, O
CEGS-08610		Windows/Performance		C
CEGS-08610		Installation Instructions		M
CEGS-08615		Shop Drawings		SD, O
CEGS-08615		Materials		M
CEGS-08615		Installation Instructions		M
CEGS-08620		Shop Drawings		SD
CEGS-08620		Prime Windows		C
CEGS-08620		Installation Instructions		M
CE35-00020		installation instructions		11
CEGS-08700		Hardware		C
CEGS-08700		Hardware Schedule		M, O
CEGS-08700		Keying Schedule	•	0
CEGS-08701		Departures from Specifications		0
CEGS-08701		Shop Drawings, Manufacturer's		SD, M, O
		Literature, Catalog Cuts		,,
CEGS-08701		Lock, Key, Gang Locking Device		S, 0
				•
CEGS-08810		Installation Instructions		M
CEGS-08810		Glass		C

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M = Manufacturer's I	าa+a		դր ∞	Tost Percent

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* SPECIFICATION						
GUIDE SPEC	PARAGRAPH		TYPE OF			
NUMBER	NUMBER	MATTERTAL	SUBMITTAL			
CEGS-08810		Insulating Glass Units	M			
CEGS-08840		Acrylic Plastic Sheets/ Glazing Material	С			
CEGS-09200		DIVISION 9 - FINISHES Shop Drawings	SD			
CEGS-09225		Shop Drawings	SD			
CEGS-09225		Lath	M			
CEGS-09215		Shop Drawings	SD			
CEGS-09215		Gypsum Base and Veneer Plaster	M			
CEGS-09215		Steel Framing and Partitions	С			
CEGS-09250		Shop Drawings	SD			
CEGS-09250		Steel Framing and Wallboard	С			
CEGS-09310		Mortar, Resin, Tile	С			
CEGS-09310		Tile and Accessories	S			
CEGS-09310		Electrical Resistance	T			
CLCC 035#0			•			
CEGS-09411		Terrazzo, Divider Strips	S			
CEGS-09411		Shop Drawings (including	SD, M			
		System Data)				
CEGS-09431		Resinous Floor Coating	C, T			
CEGS-09431		Mixing, Proportioning and	M			
		Installation Instructions				
CEGS-09431		Resinous Terrazzo	S			
CEGS-09431		Shop Drawings	SD			
CEGS-09431		Conductive Flooring	T			
amaa 00400		Pagineus Plans Costins	a ==			
CEGS-09433		Resinous Floor Coating	С, Т			
CEGS-09433		Resinous Floor Coating	M			

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	# GUIDE SPEC NUMBER	SPECIFICATION PARAGRAPH NUMBER		TYPE OF SURPRITTAL
•	<u> </u>	INCHIEN	PRITACIAL	باهنیا تانیکی
	CEGS-09433 CEGS-09433 CEGS-09433 CEGS-09433		Resinous Floor Coating Shop Drawings Electrical Resistance Spark Resistance	S SD T T
	CEGS-09445 CEGS-09445 CEGS-09445		Shop Drawings Installation Instructions Test Reports	SD M T, C
	CEGS-09510 CEGS-09510 CEGS-09510		Acoustical Material Acoustical Unit Shop Drawings	M S SD
	CEGS-09560 CEGS-09560		Strip Flooring Data and Installation Instructions	S M
	CEGS-09570 CEGS-09570		Parquet Flooring Data and Installation Instructions	s M
	CEGS-09650 CEGS-09650		Vinyl Flooring Data and Installation Instructions	S M
	CEGS-09650 CEGS-09650		Vinyl Flooring Wall Base	T M
	CEGS-09675		Data and Installation Instructions	M
	CEGS-09675		Conductive Vinyl Tile	s
	CEGS-09680		Carpet Installation Instructions	М
	CEGS-09680		Carpet	s

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_	* S GUIDE SPEC NUMBER	SPECIFICATION PARAGRAPH NUMBER		PE OF
	CEGS-09680		Carpet	С
	SPK-09682.1		Installation Instructions	M
	SPK-09682.1		Carpet	S
	SPK-09690		Shop Drawings	SD
	SPK-09690	•	Test Reports	T, C
	SPK-09690		Installation Instructions	M
	SPK-09690		Maintenance Manual	0
	SPK-09690		Carpet Tile/Moldings	S
	CEGS-09706		Resinous Floor Coating	C, T
	CEGS-09706		Data, Mixing, Proportioning	M
			and Installation Instructions	
	CEGS-09706		Resinous Flooring	S
	CEGS-09706		Shop Drawings	SD
	CEGS-09900		Lead Content	С
	CEGS-09900		Manufacturer's Data	M
	CEGS-09900		Materials	S
	CEGS-09900		Test	T
	CEGS-09900		Paint	
	CW-09940		Paint	s
	CW-09940		Special Paints and Thinners	S, M, C
	CW-09940		Federal and Military	S, C, T,
	W. 05510			0
			Specifications Paints	
			and Thinners	
	CW-09940		Proprietary Paints	M, C
	CW-09940		Paint	s, o
	CW-09940		Paint	s, o
	CW-09940		Paint	s, o

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GUIDE SPEC	PARAGRAPH	DESCRIPTION OF	TYPE OF
NUMBER	NUMBER	MATERIAL.	SUBMITITAL
CW-09940		Paint	s, o
CW-09940		Paint	S, 0
CW-09940	_	Paint	S, 0
CW-09940	C	old Paint and Thinner	S
CEGS-09960	Ъ	Mall Covering	s
CEGS-09960	Ε	ata and Installation	M
	7	instructions	
CEGS-09960	TA TA	Wainscot Cap	M
	DIV	TSION 10 - SPECIALTIES	
CEGS-10160	r	escription (Color)	М
CEGS-10160		Shop Drawings	SD
CEGS-10270	Г	escriptive Data	М
CEGS-10270	S	Shop Drawings	SD
CEGS-10270	M	Manufacturer's Standard	S
	C	blor, Floor Finish and	
	S	Sample Panel	
CEGS-10270		esign Calculations	0
CEGS-10270	C	ertificate of Compliance	С
CEGS-10270	r	lesting	${f T}$
CEGS-10270	C	Components	M
CEGS-10440	M	lanufacturer's Data	M
CEGS-10440	9	Shop Drawings	SD
CEGS-10440		igns	S
SPK-10552	s	thop Drawings	SD
CEGS-10615	D	emountable Partitions	М
CEGS-10615	D	emountable Partitions	С
CEGS~10615	S	thop Drawings	SD

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GUIDE SPEC	PARAGRAPH	DESCRIPTION OF	TYPE OF
NUMBER_	NUMBER	MATERIAL.	SUBMITITAL
CEGS-10615	Den	mountable Partitions	S
CEGS-10800	San Dat	mples and Descriptive ta	S, M, O
CEGS-10900 CEGS-10900 CEGS-10900 CEGS-10900 CEGS-10900	San Tes Har	op Drawings mples st Result(s) rdware Requirements meral (Wood Wardrobe)	SD S T M C, O
	DIVI	ISION 11 - EQUIPMENT	
CEGS-11022	Ins	stallation Instructions	М
CEGS-11022	Vau	ult Door Unit	С
CEGS-11140		op Drawings, etc	SD, O
CEGS-11140	Fra	amed Instructions	0
CEGS-11140	Tes		T
CEGS-11140	Sto	prage Tank(s)	M
CEGS-11140		nk Accessories	M
CEGS-11140		spensing Unit(s) and pump(s)	M
CEGS-11140	Coa	ating(s) for Steel Tanks	M
CEGS-11162	Cor	crete Pit	SD
CEGS-11162	_	stallation	SD, M, O
			0-77 0
CEGS-11181	Sho	op Drawings, etc	SD, O, M
CEGS-11181		amed Instructions	0
CEGS-11181	Tes	_	T
CEGS-11182		p Drawings, etc.	SD, O, M
CEGS-11182	Fra	amed Instructions	0

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NUMBER	NUMBER	MATERIAL	SUBMITI	AL.
			•	
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CEGS-11182	Т	ests	T	
CEGS-11211	S	hop Drawings	SD.	M, O
CEGS-11211		nstructions	M M	11, 0
CEGS-11211		ests	Ť	
CEGS-11211		umps	M	
CLX3D-11211	*	angs.	11	
CEGS-11212	· S	hop Drawings	SD	
CEGS-11212	T	est(s)	T	
CEGS-11212	L	ine Shaft Vertical Pump(s)	M	
CEGS-11212	S	ubmersible Vertical	M	
	T	urbine Pump(s)		
CEGS-11212	P	ump Accessories	M	
CEGS-11212	E	lectrical Equipment	M	
CEGS-11212	D	iesel Engine(s)	M	
CEGS-11212	G	asoline Engine(s)	M	
CEGS-11212	C	coling System(s)	M	
CEGS-11212	E	xhaust System(s)	M	
CEGS-11212	A	ir Intake Equipment	M	
CEGS-11212	В	atteries	M	
CEGS-11212		attery Charger(s)	М	
CEGS-11212	S	afety Control	M	
CEGS-11212		nstrument Panel(s)	M	
CEGS-11212	E	ngine Control(s)	M	
CEGS-11212	F	uel Tank(s)	M	
CEGS-11212	T	est(s)	T	
CEGS-11241	c '	hop Drawings, etc	SD,	0
CEGS-11241 CEGS-11241		ramed Instructions	0	O
CEGS-11241		ests	T	
CEGS-11241		hlorine Feeding Machine(s)	M	
CEGS-11241		vaporator(s)	M	
C160-11541		· uporuor (b)	11	
CEGS-11242	S	hop Drawings, etc	SD,	M, O

****************** MASTER	LISTING OF SUBMITTA	LS ************
C = Certificate	S	= Sample
G = Guarantee	SD	= Shop Drawings
<pre>M = Manufacturer's Data</pre>		= Test Report
0 = Other as Noted	*	= If Applicable
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*	SPECIFICATION		
GUIDE SPEC	PARACRAPH	DESCRIPTION OF	TYPE OF
NUMBER	NUMBER	MATERIAL	SUBMITTAL
CEGS-11242	ፑ ጉ	amed Instructions	O
CEGS-11242		est(s)	Ť
CEGS-11242		pochlorite-feeding Machine	M
CLOO-11242	11/1	positionice-resuming Macrimise	Pl
CEGS-11250	Sh	op Drawings	SD
CEGS-11250		st(s)	T
CEGS-11250		ftening Equipment	M
CEGS-11250	Br	ine Applications System(s)	M
CEGS-11250		ntrols	M
CEGS-11250	Wa	ter Meter(s)	M
CEGS-11250	Au	tomatic Hardness Tester	M
CEGS-11250	Wa	ter and Brine Testing	M
		uipment	
CEGS-11250	Re	sults	${f T}$
CEGS-11310	Пъ	sts	m
CEGS-11310 CEGS-11310		op Drawings	T
CEGS-11310 CEGS-11310			SD
CEGS-11310 CEGS-11310		st(s) al Water System(s)	T
CEGS-11310 CEGS-11310		ntrifugal Solids Handling	M
CEG2-11210		mps	M
CEGS-11310		bmersible Centrifugal	М
		mps	**
CEGS-11310		lf-priming Centrifugal	М
		mps	**
CEGS-11310		rew Pump(s)	M
CEGS-11310		unger Pump(s)	M
CEGS-11310		ogressive Cavity Pump(s)	M
CEGS-11310		aphragn Pump(s)	M
CEGS-11310		cessed Impeller Pump(s)	M
/GCC 11220	CL.	on Denvines ata	~
CEGS-11330 CEGS-11330		op Drawings, etc amed Instructions	SD, O
			0
CEGS-11330	J.E.	sts	${f T}$

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******	MASTER	LISTING	OF	SUBMITTAL	5 *********
C = Certificate				S	= Sample
G = Guarantee				SD	= Shop Drawings
<pre>M = Manufacturer's</pre>	Data				= Test Report
0 = Other as Noted				* :	= If Applicable
بيان بأن بأن بأن بأن بأن بأن بأن بأن بأن بأ	فريك مقدمك والريك والدوالة	ند مالد مالد مالد مالد عالم مالد مالد	أو ماد ماد ما		

THE MOST CURRENT GUIDE SPECIFICATIONS ARE AVAILABLE ON THE ELECTRONIC BULLETIN BOARD. THE INDEX IS UPDATED WEEKLY; CHECK THE BOARD FOR THE MOST UP-TO-DATE GUIDE SPECIFICATIONS. THE FOLLOWING LISTING IS PROVIDED AS GUIDANCE ONLY WHEN REQUESTING HARD COPIES. CONTACT YOUR PROJECT MANAGER FOR INSTRUCTRUCTIONS IF A NEW GUIDE SPECIFICATION DOES NOT APPEAR ON THE MASTER LISTING.

	*	SPECIFICATIO	N			
	GUIDE SPEC	PARAGRAPH	DESCRIPTION	OF	TYPE OF	•
_	NUMBER	NOMBER	MATERIAL,		SUBMITTA	Ţ
	CEGS-11330		Mechanically Cleaned		М	
			Bar Screen		_	
	CEGS-11330		Mechanical Shredder, or Grinder	Cutter	M	
	CEGS-11334		Shop Drawings, etc		SD,	M, O
	CEGS-11334		Framed Instructions		o '	•
	CEGS-11334		Tests ·		${f T}$	
	CEGS-11350		Shop Drawings, etc		SD,	M, O
	CEGS-11350		Framed Instructions		o ·	•
	CEGS-11350		Tests		T	
	CEGS-11365		Shop Drawings		SD,	M
	CEGS-11375		Welding Procedures an	nd Welders	0	
	CEGS-11375		Shop Drawings, etc		SD,	0
	CEGS-11375		Framed Instructions		0	
	CEGS-11375		Factory Tests		${f T}$	
	CEGS-11375		Performance Tests		${f T}$	

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<pre>0 = Other as Noted</pre>	* =	If Applicable
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* SPECIFICATIO	ж		
PARAGRAPH	DESCRIPTION OF	TY	PE OF
NUMBER	MATERIAL	SUE	MITTAL
	Pipe and Fittings		M
	Air-Supply Equipment		M
	Air Distribution System		M
	Diffusers		M
	Hoist(s)		M
	Shop Drawings, etc		SD, O
	Framed Instructions		0
	Tests		T
	Digester Gas Handling System		M
	Digester Heating System		M
	Oil Storage Tank(s)		M
			M
			M
	<u>-</u>		M
			11
			SD, M, O
	Framed Instructions		0
	Tests		T
	General Standards		M, O
	Shop Drawings		SD, M, O
	Tests		T
	Counters		M, O
	Sinks		M, O
			M, O
			M, O
			M, O
	··		M, O
			M, O
	Installation		M, O
	PARACRAPH	Pipe and Fittings Air-Supply Equipment Air Distribution System Diffusers Hoist(s) Shop Drawings, etc Framed Instructions Tests Digester Gas Handling System	PARAGRAPH NUMBER MATERIAL SUB Pipe and Fittings Air-Supply Equipment Air Distribution System Diffusers Hoist(s) Shop Drawings, etc Framed Instructions Tests Digester Gas Handling System Digester Heating System Oil Storage Tank(s) Oil Circulating Pump(s) Mechanical Sludge Mixing System Compressed Gas Sludge Mixing System Compressed Gas Sludge Mixing System Shop Drawings, etc Framed Instructions Tests General Standards Shop Drawings Tests Counters Sinks Utility Distribution System Pre-fab Walk-in Refrigerator Gas-burning Equipment Water Filter Paint and Coatings

******	MASTER	LISTING	OF	SUBMITTALS	*****
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[* NOTE: Specification paragraph number will be inserted by A-E]

*	SPECIFICATION		
GUIDE SPEC	PARAGRAPH	DESCRIPTION OF	TYPE OF
NOMBER	NUMBER	MATERIAL	SUBMITTAL
	-		
CEGS-11710	Sho	op Drawings	SD
CEGS-11710	Per	formance Test Report(s)	Т, О
CEGS-11710	Fac	tory Testing	T, M
CEGS-11710	Mat	erials	M
CEGS-11710	Pre	evac Sterilizers	M, O
CEGS-11710		ylene Oxide Sterilizer(s)	м, о
CEGS-11710	Loa	ding Car	M
CEGS-11710	Gas	Aerators	M
CEGS-11710	Aut	comatic Sterilizers	M
CEGS-11710	Bed	lpan Washer-Sanitizer	M
CEGS-11710	Lab	Distilling Apparatus	M
CEGS-11710	Sol	ution Warming Cabinets	М
	DIVIS	SION 12 - FURNISHINGS	
CEGS-12335		pp Drawings	SD
CEGS-12335		ples	S
CEGS-12335		tificates of Compliance	С
CEGS-12335		lical Casework	M
CEGS-12335	Den	tal Casework	M
CEGS-12390	Sho	p Drawings	SD, M, O
CEGS-12390	Sam	ples	s, 0
CEGS-12520	Sho	p Drawings	SD, M, O
CEGS-12520	Sam	ples	S
SPK-12513	Pro	duct Warranty	G
CEGS-12540		p Drawings	SD, M
CEGS-12540	Sam	ples	S
CEGS-12710		p Drawings	SD
CEGS-12710	Sam	ples	S

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		* SPECIFICATION	ON CONTRACTOR OF THE CONTRACTO		
	GUIDE SPEC	PARAGRAPH		TY	PE OF
_	NUMBER	NUMBER	MATERIAL	SUB	MUTTAL
	CEGS-12710		Descriptive Data		M
	CE-0201.01 CE-0201.01 CE-0201.01		Shop Drawings Samples and Descriptive Data Guarantee		SD, M, O S, M G
		DIVISIO	ON 13 - SPECIAL CONSTRUCTION		
	CEGS-13080 CEGS-13080		Shop Drawings Tests		SD, O T
	CEGS-13120 CEGS-13120 CEGS-13120		Shop Drawings Materials Materials		SD C S
	CEGS-13206 CEGS-13206		Shop Drawings Tests		SD, O T, C
	CEGS-13210 CEGS-13210 CEGS-13210 CEGS-13210 CEGS-13210		Shop Drawings Design Calculations Tests Certification VOC Analysis/Tests		SD, O T C T, C, O
	CEGS-13211 CEGS-13211 CEGS-13211		Shop Drawings and Calculations Tests Cleaning		SD, O T O
	CEGS-13234 CEGS-13234 CEGS-13234		Shop Drawings Test(s) Insulation Calculations		SD, M, O T O
	CEGS-13600 CEGS-13600		Shop Drawings, etc Tests		SD, O

******	MASTER	LISTING	OF	SUBMITTALS	***	*****
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C = Certificate	S	=	Sample
G = Guarantee	SD	=	Shop Drawings
M = Manufacturer's Data	${f T}$	=	Test Report
0 = Other as Noted	*	=	If Applicable
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[* NOTE: Specification paragraph number will be inserted by A-E]

	* SPECIFICATION						
GUIDE SPEC	PARAGRAPH	DESCRIPTION OF	TY	PE OF			
NUMBER	NUMBER	MATTORIAL	SUB	<u>IITIAL</u>			
CEGS-13600		Brazing Alloy(s)		М			
CEGS-13600		Expansion Joint(s)		M			
CEGS-13600		Solar Collector(s)		M			
CEGS-13600		Heat Transfer Fluid(s)		M			
CEGS-13600		Heat Exchanger(s)		M			
CEGS-13600		Radiator(s)		M			
CEGS-13600		Fan Coil Unit(s)		M			
CEGS-13600		Air Handling Unit(s)		M			
CEGS-13600		Pump(s)		M			
CEGS-13600		Tank(s), Closed Expansion		M			
CEGS-13600		Liquid Storage Tank(s)		M			
CEGS-13600		Hot Water Storage Tank(s)		M			
CEGS-13600		Controls and Instrumentation		M			
CEGS-13600		Expansion Joint(s)		M			
CEGS-13750		Shop Drawings		SD			
CEGS-13750		Testing Survey Report		T			
CEGS-13814		Shop Drawings, etc		SD, O, M			
CEGS-13814		Test Plan(s) and Procedure(s)		0			
CEGS-13814		Test Report(s)		T			
				_			
CEGS-13810		FCC Class A Computing Device		0			
		Verification		_ •			
CEGS-13810		Testing Submittals		T, 0			
CEGS-13810		Data Entry Forms		0			
CEGS-13810		Testing		T			
CEGS-13810		Data Transmission Media		T			
		Test Report					
CEGS-13810		Field Equipment		SD, M			
CEGS-13810		System Equipment		SD, M			
CEGS-13810		System Software		M			
CEGS-13810		Command Software		M			
CEGS-13810		Application Programs		M			

****** MASTER LIS	STING OF SUBMITTALS ************
C = Certificate	S = Sample
G = Guarantee	SD = Shop Drawings
M = Mamufacturer's Data	T = Test Report
O = Other as Noted	<pre>* = If Applicable</pre>
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*	SPECIFICATIO	N.		
GUIDE SPEC	PARAGRAPH	DESCRIPTION OF		TYPE OF
NUMBER	NUMBER	MATERIAL		SUBMITTAL
CEGS-13810		CCC Software		M
CEGS-13810		FID Software		М
CEGS-13811		FCC Class A Computing Device Verification		o
CEGS-13811		Testing Submittals		T, O
CEGS-13811		Data Entry Forms		0
CEGS-13811		Existing Controls Report		0
CEGS-13811		Testing		T
CEGS-13811		Data Transmission Media Test		${f T}$
		Report		
CEGS-13811		Field Equipment		SD, M
CEGS-13811		System Equipment		SD, M
CEGS-13811		System Software		M
CEGS-13811		Command Software		M
CEGS-13811		Applications Programs		M
CEGS-13811		FID Software		M
CEGS-13811		Existing Controls Report		0
CEGS-13812		FCC Class A Computing Device Verification		0
CEGS-13812		Testing Submittals		Т, О
CEGS-13812		Data Entry Forms		oʻ
CEGS-13812		Existing Controls Report		0
CEGS-13812		Testing		T
CEGS-13812		Data Transmission Media Test	T	
		Report		
CEGS-13812		Field Equipment		SD, M
CEGS-13812		System Equipment		SD, M
CEGS-13812		System Software		M
CEGS-13812		Command Software		M
CEGS-13812		Applications Programs		M
CEGS-13812		FID Software		M
CEGS-13812		Existing Controls Report		0

******	MASTER	LISTING	OF	SUBMITTAL	s	*****
C = Certificate				S	=	Sample
G = Guarantee				SD	=	Shop Drawings
<pre>M = Manufacturer's</pre>	Data			${f T}$	=	Test Report
0 = Other as Noted				*	=	If Applicable
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* SPECIFICATION						
GUIDE SPEC	PARAGRAPH	DESCRIPTION OF	TYPE OF			
NUMBER	NUMBER	<u>MATERIAL</u>	SUBMITTAL			
CEGS-13813		FCC Class A Computing Device	0			
		Verification				
CEGS-13813		Testing Submittals	т, о			
CEGS-13813		Data Entry Forms	0			
CEGS-13813		Existing Controls Report	0			
CEGS-13813		Testing	${f T}$			
CEGS-13813		Data Transmission Media Test	${f T}$			
		Report				
CEGS-13813		Field Equipment	SD, M			
CEGS-13813		System Equipment	SD, M			
CEGS-13813		System Software	M			
CEGS-13813		Applications Program	M			
	DIVIS	SION 14 - CONVEYING SYSTEMS				
CEGS-14200		Freight Elevator Platform and Sling	SD, M			
CEGS-14200		Passenger Elevator Door	SD, M			
CEG5-14200		Hangers	SD/ II			
CEGS-14200		Passenger Elevator Door	М			
		Operators				
CEGS-14200		Freight Elevator Door and	М			
		Gate Operators				
CEGS-14250		Elevator Shop Drawings	SD			
CEGS-14250		Passenger Elevator Car	SD, M			
CEGS-14250		Freight Elevator Car	SD, M			
CEGS-14250		Passenger Elevator Entrances	SD, M			
CEGS-14250		Freight Elevator Entrances	SD, M			
CEGS-14250		Freight Elevator Operating	SD, M			
		and Signal Devices				
CEGS-14250		Automatic Emergency Power Operation	М			

********	MASTER LISTING OF	SUBMITTALS	******
C = Certificate		s =	Sample
G = Guarantee		SD =	Shop Drawings
M = Manufacturer's 1	Data	T =	Test Report
<pre>0 = Other as Noted</pre>		* =	If Applicable
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[* NOTE: Specification paragraph number will be inserted by A-E]

	GUIDE SPEC NUMBER	SPECIFICATIO PARAGRAPH NUMBER	ON DESCRIPTION OF MATERIAL		PE OF
-	INCHIDEN	MODERA	<u> </u>	SUL	at i iviti
	CEGS-14250		Passenger Car Operation		М
			(Single-car Selective		
			Collective)		
	CEGS-14250		Passenger Car Operation		M
			(Two-car Selective Collective)		
	CEGS-14250		Hospital Emergency Service		M
	CEGS-14250		Freight Car Operation		M
			(Power Door Operation)		
	CEGS-14250		Fire Service		M
	CEGS-14250		Elevator Power Unit		SD, M
	CEGS-14250		Automatic Leveling Device		M
	CEGS-14250		Jack Unit		M
	CEGS-14250		Guides and Guide Rails		SD, M
	CEGS-14250		Supporting Structure		SD
	CEGS-14250		Buffers		SD, M
	CEGS-14250	•	Passenger Elevator Platform and Sling		SD, M
	CEGS-14250		Freight Elevator Platform		SD, M
	CD35-14250		and Sling		SD, FI
	CEGS-14250		Passenger Elevator Door		SD, M
			Hangers		·
	CEGS-14250		Passenger Elevator Door		M
			Operators		
	CEGS-14250		Freight Elevator Door		M
			and Gate Operators		
	CEGS-14630		Shop Drawings		SD, O
	CEGS-14630		Instructions		0
	CEGS-14630		Tests		T
					_
	CEGS-14580		Shop Drawings, etc		SD, M, O

DIVISION 15 - MECHANICAL

****** MASTER LISTING OF	SUBMITTALS ***************
C = Certificate	s = Sample
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* SPECIFICATION					
GUIDE SPEC	PARAGRAPH	DESCRIPTION OF	TYPE OF		
NUMBER	NUMBER	MATERIAL	SURMITIAL		
CE-0302.01		Shop Drawings, etc	SD, O		
CE-0302.01		Welding Procedures and Welders	0		
CE-0302.01		Compressor Unit(s)	M		
CE-0302.01		Condensing Unit(s)	M		
CE-0302.01		Air Cooled Condenser(s)	M		
CE-0302.01		Evaporative Condenser(s)	M		
CE-0302.01		Water-cooled Condenser(s)	M		
CE-0302.01		Receiver(s)	M		
CE-0302.01		Cooling Tower(s)	M		
CE-0302.01		Evaporator(s)	M		
CE-0302.01		Shut Off Valve(s)	M		
		for Fluorcarbons	M		
CE-0302.01		Solenoid Valve(s)	M		
		for Fluorocarbons			
CE-0302.01		Expansion Valve(s)	M		
		Fluorcarbons			
CE-0302.01		Filter-driers	M		
CE-0302.01		Moisture Indicator Sight	M		
		Glass(es)			
CE-0302.01		Separator(s) for Fluorcarbons	M		
CE-0302.01		Back-Pressure Regulating	M		
		Valve(s) for Fluorcarbons			
CE-0302.01		Solenoid Valve(s) for Ammonia	M		
CE-0302.01		Expansion Valve(s) for Ammonia	M		
CE-0302.01		Separator(s) for Ammonia	M		
CE-0302.01		Back-Pressure Valve(s)	M		
		for Ammonia			
CE-0302.01		Temperature Controls	M		
CE-0302.01		Control Settings	M		
CE-0302.01		Test(s)	T		
CE-0302.01		Framed Instructions	0		
CE-2206		Tests	T		

******* MASTER L	JISTING OF SUBMITTALS	*****
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*	SPECIFICATIO	N	
GUIDE SPEC	PARAGRAPH	DESCRIPTION OF	TYPE OF
NUMBER	NUMBER	<u>MATERIAL</u>	SUBMITIAL
CE-2206	I	Drawings, etc	SD, M
CE-2303.01		Drawings, etc	SD, O
CE-2303.01	1	Factory Tests	T
CE-2308	(Grease Lubrication System	M
CE-2309	I	Dehumidification System	M
SPK-15060	5	l'ests	т, с
SPK-15060]	Instructions	0
SPK-15060	1	Installation Procedures	С, О
CEGS-15052		Welder Procedure	С
		Qualifications	
CEGS-15052		Wondestructive Examination (NDE)	0
CEGS-15052		DE Personnel Certification Procedures	0
CEGS-15052		Inspector Certification(s)	С
CEGS-15052		NDE Personnel Certificate(s)	Ċ
CEGS-15052		Shop Drawings	SD
SPK-15175	S	Shop Drawings	SD, O
SPK-15175		Permits	o '
SPK-15175		Welding Procedures and Qualifications	ō
SPK-15175	-	Instructions	М
SPK-15175		lest	T
ODOC 15350	r	Thom Descriped	an a
CEGS-15250 CEGS-15250		Shop Drawings	SD, O
	(Cutaway Section Display Class 2 Adhesive	S
CEGS-15250			M
CEGS-15250	C	Class I Adhesive	M

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	e of ITITAL M
NUMBER MATERIAL SUBM	M M
	M
	M
CEGS-15250 Bedding Compound	
	<u>M</u>
	M
	M.
	M
CEGS-15250 Insulation for Cold Equipment 1	M
	M.
	M.
	M.
	M.
for Equipment	
	v <u>i</u>
	M.
-	M.
	M
Pipes	
•	M.
Pipelines	
	Y I
Pipelines	. _
• • • • • • • • • • • • • • • • • • •	N
CEGS-15365 Shop Drawings S	SD, 0
	r
CEGS-15365 Instructions	M
	r
	r
	_
CEGS-15488 Welding Procedures and Names C)
	M
	SD
→	M
CEGS-15488 Water Heaters	vī.

****** MASTER LISTING OF	SUBMITTALS *************
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*	SPECIFICATIO	X	
GUIDE SPEC	PARAGRAPH	DESCRIPTION OF	TYPE OF
NUMBER	NUMBER	MATERIAL	SUBMITTIAL
CEGS-15488		Pressure Regulators	M
CEGS-15488		Meters	M
CEGS-15488		Water Heaters	G
CEGS-15400		Backflow Preventer(s)	М
CEGS-15400		Welding Procedures and Names *	0
CEGS-15400		Shop Drawings	SD
CEGS-15400		Handicapped Water Closet(s) and Trim	M
CEGS-15400		Non-Handicapped Water Closet(s) and Trim	M
CEGS-15400		Mixing Valve(s)	M
CEGS-15400		Bathtub(s) and Trim	M
CEGS-15400		Can Rinser-sanitizer(s)	M
CEGS-15400		Combination Tub(s) and Sink(s)	M
		and Trim	
CEGS-15400		Drinking Fountain(s) and Trim	M
CEGS-15400		Food Waste Disposer(s)	M
CEGS-15400		Garbage Disposer(s)	M
CEGS-15400		Handicapped Water Closet(s)	M
		and Trim	
CEGS-15400		Kitchen Sink(s) and Trim	M
CEGS-15400		Laboratory Sink(s) and Trim	M
CEGS-15400		Laundry Sinks(s) and Trim	M
CEGS-15400		Lavator(ies) and Trim	M
CEGS-15400		Non-handicapped Water	M
		Water Closet(s) and Trim	
CEGS-15400		Scullery Sink(s) and Trim	M
CEGS-15400		Service Sink(s) and Trim	M
CEGS-15400		Shower(s) and Trim	M
CEGS-15400		Shower-bath Outfit(s)	M
CEGS-15400		Urinal(s) and Trim	M
CEGS-15400		Wash Fountain(s) and Trim	M
CEGS-15400		Backflow Preventer(s)	M

******	MASTER	LISTING	OF	SUBMITTIAL	5 **************
C = Certificate				S	= Sample
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M = Manufacturer's I	Data			T	= Test Report
O = Other as Noted				* :	= If Applicable

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[* NOTE: Specification paragraph number will be inserted by A-E]

*	SPECIFICATION	ON	
GUIDE SPEC	PARAGRAPH	DESCRIPTION OF	TYPE OF
NUMBER	NUMBER	MATERIAL	SUBMITTIAL
CEGS-15400		Electric Water Cooler(s)	M
CEGS-15400		Grease Interceptor(s)	M
CEGS-15400		Can Rinser-sanitizer(s)	M
CEGS-15400		Dishwashing Machine(s)	M
CEGS-15400		Water Heater(s)	M
CEGS-15400		Tank(s)	M
CEGS-15400		Pump(s)	M
CEGS-15400		Water Pressure Booster	M
		System(s)	
CEGS-15400		Air Compressor(s) and	M
		Appurtenances	
CEGS-15400		Can Rinser-sanitizer(s)	M
CEGS-15400		Handicapped Water Closet(s)	M
		and Trim	
CEGS-15400		Non-handicapped Water	M
		Closet(s) and Trim	
CEGS-15400		Shower-bath Outfit(s)	M
CEGS-15400		Wash Fountain(s) and Trim	M
CEGS-15400		Operational Test	$\overline{\mathbf{r}}$
		- <u>F</u>	_
CEGS-15410		Welding Procedures and	0
		Welders	•
CEGS-15410		Drawings, etc	SD, O
CEGS-15410		Thermostatic Mixing Valve(s)	M,
<u> </u>		and Cabinet(s)	
CEGS-15410		Lab Service Fitting(s)	M
CEGS-15410		Fixture(s)	M
CEGS-15410		Electric Water Cooler(s)	M
CEGS-15410		Grease Interceptor(s)	M
CEGS-15410		Can Rinser-sanitizer(s)	M
CEGS-15410		Dishwashing Machine(s)	M
CEGS-15410		Water Heater(s)	M
CEGS-15410		Hot Water Storage Tank(s)	M
CEGS-15410		Sump Pump(s)	M M
CEMO_TD410		point routh(s)	171

***************	STER LISTING OF SUBMITTE	LS *******
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*	SPECIFICATION	ON	
GUIDE SPEC	PARAGRAPH	DESCRIPTION OF	TYPE OF
NUMBER	NUMBER	MATERIAL	SUBMITTAL
CEGS-15410		Circulating Pump(s)	М
CEGS-15410		Booster Pump(s)	M
CEGS-15410		Water Pressure Booster Systems	M
CEGS-15410		Air Compressor(s) and Accessories	M
CEGS-15410		Vacuum Pump(s) and Receiver(s)	M
CEGS-15410		Medical Gas System(s)	M
CEGS-15410		Alarm Panel(s)	M
CEGS-15410		Surgical Dispenser(s)	M
CEGS-15410		Evacuation System(s)	M
CEGS-15410		Reverse Osmosis System(s)	M
CEGS-15410		Water Softening Equipment	M
CEGS-15410		Test Schedule for Evacuation	0
		System(s)	
CEGS-15410		Test for Evacuation System(s)	${f T}$
CEGS-15410		Plumbing Operational Test(s)	T
CEGS-15488		Welding Procedures and Names	0
CEGS-15488		Pipe and Fittings, etc	M
CEGS-15488		Drawings	SD
CEGS-15488		Tanks	M
CEGS-15488		Water Heaters	M
CEGS-15488		Pressure Regulators	M
CEGS-15488		Meters	M
CEGS-15488		Water Heaters	G
CEGS-15495		Welding Procedures and Names	0
CEGS-15495		Drawings	SD, M
CEGS-15495		Local Instructions	o ·
CEGS-15495		Test(s)	T
CEGS-15495		Cleaning Procedures(s)	0
CEGS-15495		Pump(s)	M
CEGS-15495		Reservoir(s)	M

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*	SPECIFICATIO	n	
GUIDE SPEC	PARAGRAPH	DESCRIPTION OF	TYPE OF
NUMBER	NUMBER	MATERIAL	SUBMITTAL
	-		
CEGS-15495		Cylinder(s)	M
CEGS-15495		Fluid Motor(s)	M
CEGS-15495		Accumulator(s)	M
CEGS-15495		Valve(s)	M
CEGS-15495		Intensifier(s)	M
CEGS-15495		Fluid Cooler(s)	M
CEGS-15495		Filtration Equipment	M
CEGS-15495		Fluid Lines and Fitting(s)	M
CEGS-15495		Hydraulic Fluid	M
CEGS-15495		Shaft Coupling(s)	M
CEGS-15495		Pressure Gage(s)	M
CEGS-15495		Control Component(s)	M
CEGS-15495		Control Console(s) and Valve	M
		and Gage Panel(s)	
CEGS-15495		Motor(s) and Control(s)	M
CEGS-15501		Drawings, etc	SD, O
CEGS-15501		Test	T
CEGS-15501		Nozzle(s)	M
CEGS-15501		Sprinkler(s)	M
CEGS-15501		Alarm Check Valve(s) and Trim	M
CEGS-15501		Dry Pipe Valve(s) and	M
		Appurtenances	
CEGS-15501		Deluge Valve(s) and	M
		Appurtenances	
CEGS-15501		Heat Detector(s) and System	SD, M
CEGS-15501		Solenoid Valve(s)	M
CEGS~15501		Rate-of Flow Valve(s)	M
CEGS-15555		Welding Procedures and Welders	0
CEGS-15555		Drawings, etc	SD, M
CEGS-15555		Framed Instructions	0 0
CEGS-15555		Test(s)	· T
CEGS-15555 CEGS-15555		Generator(s)	M
CCCT		onintami (p)	11

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	SPECIFICATIO		
GUIDE SPEC	PARAGRAPH		TYPE OF
NUMBER	NUMBER	MATERIAL.	SUPMTITAL
CEGS-15555		Fuel Burning Equipment	M
CEGS-15555		Combustion Control Equipment	M
CEGS-15555		Instrument and Control	M
		Panel(s)	
CEGS-15555		Nitrogen Pressurization	M
CEGS-15555		System(s) Blowoff System(s)	w
			M
CEGS-15555 CEGS-15555		Waste Heat Recovery System(s)	M
CEGS-15555		Draft Fan(s)	M
CEGS-15555		Electric-motor Driven Pump(s)	M M
CEGS-15555		Expansion Tank(s) Heat Exchanger(s)	
· -			M
CEGS-15555		Chemical Feeder(s)	M
CEGS-15555		Water Softening Equipment	M
CEGS-15555		Sediment Trap(s) and Blenders	M
CEGS-15555		Line Mixer(s)	v
CEGS=15555			M
CEGS-15555		Liquid Level Control Column(s)	M
CEGS-15555 CEGS-15555		Air Compressor(s)	M
CEGS-15555 CEGS-15555		Expansion Joint(s) Valve(s)	M M
CEGS-15555		Backpressure Relief Valve(s)	M M
CEGS-15555		Fuel Oil Tank(s)	M M
CEGS-15555		Coal Handling Equipment	M M
CEGS-15555		Ash Handling Equipment	
CEGS-15555		Testing Schedule	M
CEGS-15555			O T
CEG2-12222		Capacity and Efficiency Tests	Т
CEGS-15845		Welding Procedures and Welders	0
CEGS-15845		Shop Drawings, etc	SD, M, O
CEGS-15845		Framed Instructions	0 .
CEGS-15845		Tests	${f T}$
CEGS-15845		Heat Recovery Equipment	M

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*	SPECIFICATION		
GUIDE SPEC	PARAGRAPH	DESCRIPTION OF	TYPE OF
NUMBER	NUMBER	MATERIAL	SUBMITTAL
			
	••.	tation was a month to a	•
CEGS-15940		lding Fume Tubing	M
CEGS-15940		mper(s)	M
CEGS-15940		spension System(s)	M
CEGS-15940		amed Instructions	M
CEGS-15940	Te	st(s)	T
	DIVI	SION 16 - ELECTRICAL	
CEGS-16113	Lis	st of Materials and	М
	Ecn	ripment	
CEGS-16113		nufacturer's Drawings	SD
CEGS-16113		ntractor's Drawings	SD
CEGS-16113		erials and Equipment	M
	-		
CEGS-16115	Sha	op Drawings	SD
CEGS-16115	Mat	terials and Equipment	М
CEGS-16224	We:	lder Qualifications and	С, О
		cedures	-, -
CEGS-16224		st Reports	T
CEGS-16224		mpressor and Turbine	SD, M
CEGS-16224		bine Components and	SD, M
		xiliaries	,
CEGS-16224		eed Reducing Gear and	SD, M
		. Drive Gear	•
CEGS-16224	Gea	merator and Exciter	SD, M
CEGS-16224		ntrol System and Related	SD, M
		ipment	,
CEGS-16224		scellaneous Electrical and	SD, M
		strument Items	,
CEGS-16224		nuctures, Services and	SD, M
		ctory Painting	,
CEGS-16224		el Oil Bulk Storage Tanks	SD, M
CEGS-16224		ctory Tests	С, Т

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*******	*****	*****	***	*****	***	******

*	SPECIFICATIO	ON		
GUIDE SPEC	PARAGRAPH	DESCRIPTION OF	TY	pe of
NUMBER	NUMBER	MATERTAL		MITTAL
 				
cmca 16004		Development Control Colle		.,
CEGS-16224		Power and Control Cable		M
oraca 1.500.4		(600 V - 5 KV		
CEGS-16224		Power Cable (5 - 15 KV)		M
CEGS-16224		Cable Terminations		M
0000 1000A		(5 – 15 KV)		
CEGS-16224		Field Testing and Inspection		T
CEGS-16224		Performance Tests		T
CEGS-16225		Experience		M
CEGS-16225		Welding Qualifications		С
CEGS-16225		Performance Test Reports		${f T}$
CEGS-16225		Steam Turbine		SD, M
CEGS-16225		Speed Reducing Gear		SD, M
CEGS-16225		Generator and Exciter		SD, M
CEGS-16225		Factory Tests		T, C
CEGS~16225		Power and Control Cable		M
		(600 V - 5 KV)		
CEGS-16225		Power Cable (5 - 15 KV)		M
CEGS-16225		Cable Terminations		M
		(5 - 15 KV)		
CEGS-16225		Field Testing and Inspection		T
CEGS-16225		Performance Tests		T
CEGS-16262		Certified Laboratory		C, T
		Test Reports		
CEGS-16262		Factory Tests and Reports		T
CEGS-16262		Automatic Transfer Switches		M
CEGS-16263		Welding Qualifications		С
CEGS-16263		Experience		Ö
CEGS-16263		Certificates of Compliance		Č
CEGS-16263		Certificate of Fuel		C
CTV20-10503		Consumption		C
CEGS-16263		Shop Drawings		SD
-10203		ninh manda		ענ

************************ MASTER LISTING O	F SUBMITTALS ************
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	SPECIFICATIO			
GUIDE SPEC	PARAGRAPH	DESCRIPTION OF	TY	PE OF
NUMBER	NUMBER	<u>MATERIAL</u>	SUB	MITAL
CEGS-16263		Performance Test Reports		T
CEGS-16263		Batteries		M
CEGS-16263		Battery Chargers		M
CEGS-16263		Circuit Breakers		M
CEGS-16263		Generator and Exciter		M
CEGS-16263		Switchgear		SD, M
CEGS-16263		Tanks		SD, M
CEGS-16263		Engine		M
CEGS-16263		Fuel System		SD, M
CEGS-16263		Centrifuge		M
CEGS-16263		Cooling System		SD, M
CEGS-16263		Engine-cooling with		SD, M
		Heat-recovery Equipment		
CEGS-16263		Exhaust-gas Boiler		SD, M
CEGS-16263		Exhaust Mufflers		M
CEGS-16263		Starting System		M
CEGS-16263		Instrumentation		SD, M
CEGS-16263		Safety Circuit		SD, M
CEGS-16263		Generator		M
CEGS-16263		Exciter		M
CEGS-16263		Voltage Regulator		M
CEGS-16263		Generator Switchboard		SD, M
CEGS-16263		Switchgear		SD, M
CEGS-16263		Switchgear		SD, M
CEGS-16263		Automatic Operation		SD, M
CEGS-16263		Station Battery System		M
CEGS-16263		Automatic High-low		M
		Battery Charging		
CEGS-16263		Inspection and Tests		C, T
CEGS-16263		EM Compatibility		C, T
CEGS-16264		Operating Experience		C, M
CEGS-16264		Certificate of Compliance		C
CEGS-16264		Shop Drawings		SD
CDG0-10204		and arming		مادر

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	SPECIFICATIO		
GUIDE SPEC	PARAGRAPH	DESCRIPTION OF	TYPE OF
NUMBER	NUMBER	MATERIAL	SURMITTAL
		,	
CEGS-16264		Manufacturer Certification	С
CEGS-16264		Batteries	W
CEGS-16264		Circuit Breakers	M
CEGS-16264		Exciter	M
CEGS-16264		Generator	M
CEGS-16264		Engine	M
CEGS-16264		Engine Cooling System	SD, M
CEGS-16264		Air Intake System	M
CEGS-16264		Exhaust System	M
CEGS-16264		Emissions	C
CEGS-16264		Starting System	M
CEGS-16264		Storage Battery	M
CEGS-16264		Pneumatic Testing	${f T}$
CEGS-16264		Safety System	SD, M
CEGS-16264		Governor	M
CEGS-16264	,	Engine Instrumentation	SD, M
CEGS-16264	•	Generator	M
CEGS-16264]	Exciter	M
CEGS-16264	•	Voltage Regulator	M
CEGS-16264	(Generator Control Panel	SD, M
CEGS-16264]	Factory Certification	C, T
CEGS-16264		Factory Inspection and Tests	T
CEGS-16264		On-site Tests	T
CEGS-16264	•	Nest Data	С, Т, О
CEGS-16311]	Factory Tests	T
CEGS-16311]	Power System Protection	0
		Coordination Study	-
CEGS-16311		Proof of Compliance	M, C
CEGS-16311	(Certificate of Satisfactory Use	c
CEGS-16311	Č	Certificate of Non-PCB Filled Transformer	С
CEGS-16311		Shop Drawings	SD

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GUIDE SPEC	SPECIFICATIO PARAGRAPH	n Description of	TYPE OF
NUMBER	NUMBER	MATERIAL	SUBMITTAL
<u> </u>	140211325	- PALISTAN	CAPILITAN
CEGS-16311		Factory Test Reports	${f T}$
CEGS-16311		Field Test Reports	${f T}$
CEGS-16311		Annunciators	SD, M
CEGS-16311		Circuit Breakers	M
CEGS-16311		Insulators	M
CEGS-16311	•	Luminaires	М
CEGS-16311	•	Meters (Time Integrating)	M
CEGS-16311		Power Fuse Disconnect Units	M
CEGS-16311		Substation Equipment Items	M
CEGS-16311		Step-Voltage Regulators	SD, M
CEGS-16311		Surge Arrestors	M
CEGS-16311	·	Switches	M
CEGS-16311	•	Metal-clad Switchgear	SD, M
CEGS-16311		Metal-enclosed Interrupter	SD, M
	i	Switchgear	
CEGS-16311	•	PCB Content Testing	${f T}$
CEGS-16311		Articulated Primary Unit	SD, M
	i	Substation	
CEGS-16311	•	Primary Unit Substation	SD, M
CEGS-16311		Incoming Lines and Aerial	M
		Bases	
CEGS-16311		Suspension Insulators	M
CEGS-16311		Incoming Line Switches	M
CEGS-16311]	Metal-enclosed Interrupter	SD, M
	}	Switchgear	-
CEGS-16311	(Oil Circuit Breaker	M
CEGS-16311		Power Transformer	SD, M
CEGS-16311		Primary Unit Substation	SD, M
CEGS-16311		Substation Transformer	SD, M
CEGS-16311		Articulated Primary Unit	SD, M
		Substation	•
CEGS-16311	j	Metal Enclosed Bus	SD, M
CEGS-16311	1	Metal-clad Switchgear	SD, M
CEGS-16311		Step-voltage Regulators	SD, M
			•

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GUIDE SPEC	PARAGRAPH	DESCRIPTION OF	TYPE OF
NUMBER	NUMBER	MATERIAL	SUBMITTAL
 			
		was 171 at 1 a	
		Installation	
CEGS-16311		Battery Racks	SD, M
CEGS-16311		Luminaires	M
CEGS-16311		Annunciator System	SD, M
CEGS-16311		Ground Resistance	T
		Measurements	
CEGS-16370		Nameplates (Non-PCB	С
		Certification)	
CEGS-16370		Certified Factory Test	Т, С
CEGS-16370		Certifications	c [*]
CEGS-16370		Certified Field Test Reports	Т, С
CEGS-16370		Certification of Qualifi-	c [']
		cations of Medium-Voltage	
		Cable Installers	
CEGS-16370		Protective Coordination Study	0
CEGS-16370		Automatic Circuit Reclosers	M
CEGS-16370		Capacitors	M
CEGS-16370		Bare Conductors	M
CEGS-16370		Insulated Conductors	М
CEGS-16370		Connectors and Splices	M
CEGS-16370		Fused Cutouts, Primary	M
CEGS-16370		Steel Poles	M
CEGS-16370		Wood Poles	M
CEGS-16370		Surge Arrestors	М
CEGS-16370		Transformers	M
CEGS-16370		Splices and Connectors	M
CEGS-16370		Steel Poles	M
CEGS-16370		Insulators	M
CEGS-16370		Guy Assemblies	M
CEGS-16370		Fuse Cutouts and Fuses	M
CEGS-16370		Surge Arrestors	M
CEGS-16370		Overhead Distribution	M
		Transformers	

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* SPECIFICATION				
GUIDE SPEC	PARAGRAPH	DESCRIPTION OF	TYPE OF	
NUMBER	NUMBER	MATERTAL	SUBMITTAL	
CEGS-16370		Group-operated Load	M	
		Interrupter Switches		
CEGS-16370		Capacitor Equipment	M	
CEGS-16370		Automatic Circuit Reclosers	M	
CEGS-16370		Lighting	M	
CEGS-16370		Ground Resistance Measurements	${f T}$	
CEGS-16370		Medium-voltage Preassembled		
	·	Cable Test		
CEGS-16375	Namepla	tes	С	
200.5		(Non-tetrachloroethylene/non-	•	
		PCB Certification)		
CEGS-16375		Proof of Compliance	С	
CEGS-16375		Shop Drawings	SD, M	
CEGS-16375		Certificates of Compliance	c ·	
		(Manufacturer)		
CEGS-16375		Certified Factory Test Reports	C, T	
CEGS-16375		Contractor's Data	C, T	
CEGS-16375		Certificates	C	
CEGS-16375		Certified Field Test Reports	C, T	
CEGS-16375		Certification of the Quali-	С	
		fications of Medium-voltage		
		Installers		
CEGS-16375		Protective Coordination	0	
		Study		
CEGS-16375		Busways	SD, M	
CEGS-16375		Cables	M	
CEGS-16375		Medium-voltage Cable	M	
		Terminations		
CEGS-16375		Separable Medium-voltage	M	
		Connectors		
CEGS-16375		Luminaire Components,	M	
omaa 16055		Roadway Lighting		
CEGS-16375		Poles	SD, M	

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CEGS-16375	*			
CECS-16375	GUIDE SPEC	PARAGRAPH	DESCRIPTION OF	TYPE OF
CEGS-16375 Switchgear, Metal-enclosed SD, M	NUMBER	NUMBER	MATERIAL	SUBMITTAL
CEGS-16375 Switchgear, Metal-enclosed SD, M				
CEGS-16375 Switchgear, Metal-enclosed SD, M				
Interrupter Type CEGS-16375 Surge Arrestors M CEGS-16375 Transformers M CEGS-16375 Cable, Stations General SD, M Requirements CEGS-16375 Medium-voltage Cables SD, M CEGS-16375 Cable Joints M CEGS-16375 Low-voltage Cables M CEGS-16375 Manholes SD, M CEGS-16375 Hardware M CEGS-16375 Transformer Station SD, M CEGS-16375 Transformer Station SD, M CEGS-16375 Surge Protection M CEGS-16375 Busways SD, M CEGS-16375 Lighting M CEGS-16375 Ground-resistance C, T Measurements CEGS-16375 Medium-voltage Cable Test T CEGS-16415 Busway SD, M CEGS-16415 Circuit Breakers M CEGS-16415 Circuit Breakers M CEGS-16415 Fixtures M CEGS-16415 Powice Plates M CEGS-16415 Fixtures M CEGS-16415 Powice Plates M CEGS-16415 Powi		_		
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CEGS-16415 Switchboard, Dead-Front M				-
				

******* MAS	STER LISTING OF	SUBMITTALS	******
C = Certificate		S =	Sample
G = Guarantee		SD =	Shop Drawings
<pre>M = Manufacturer's Data</pre>	ā.		Test Report
0 = Other as Noted		* =	If Applicable

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[* NOTE: Specification paragraph number will be inserted by A-E]

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GUIDE SPEC	PARAGRAPH	DESCRIPTION OF	TYPE OF
NOMBER	NUMBER	MATERIAL	SUBMITTAL
CEGS-16415		Switchgear Assemblies, Power	SD, M
CEGS-16415		Switches	3D, M M
CEGS-16415		Transformers	M M
		Isolated Power Systems	M M
CEGS-16415		Ground Rods	T T
CEGS-16415			-
CEGS-16415		Wiring Methods, Cable Trays	SD, M
CEGS-16415		Busway Systems	SD, M
CEGS-16415		Floor Outlets	M
CEGS-16415		Device Plates	M
CEGS-16415		Receptacles	M
CEGS-16415		Wall Switches	M
CEGS-16415		Circuit Breakers	
CEGS-16415		Service Equipment	SD, M
CEGS-16415		Panelboards and Load Centers	SD, M
CEGS-16415		Power Switchgear Assemblies	SD, M
CEGS-16415		Circuit Breakers	M
CEGS-16415		Metal Oxide Varistors	. М
CEGS-16415		Motor Control	SD, M
CEGS-16415		Motor Control Centers	SD, M
CEGS-16415		Transformers	M
CEGS-16415		Lamps and Lighting Fixtures	М
CEGS-16415		X-ray Film Illuminators	M
CEGS-16415		Stage Footlights	M
CEGS-16415		Emergency Light Sets	M
CEGS-16415		Battery Chargers	M
CEGS-16415		Tests	T
CEGS-16505		Cable	М
CEGS-16505		Connections	M
CEGS-16505		Poles	M
CEGS-16505		Cable	M
CEGS=16505		Poles	M M
CEGS-16505		Lighting	M
CEGS-16505		Fused-in-line Connections	M
CEV2-10303		Leader-Hilling Compositions	171

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M = <u>Manufacturer</u> 's 1	Data			T	=	Test Report
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GUIDE SPEC	PARACRAPH	DESCRIPTION OF	TYPE OF
NUMBER	NUMBER	MATERIAL	SUBMITIAL
•			
CEGS-16505		Transformers	M
CEGS-16505		Lighting Control System	M
CEGS-16505		Grounding	$\overline{\mathbf{T}}$
CEGS-16505		Ground Resistance Measurements	Ť
CEGS-16610		Shop Drawings	SD
CEGS-16610		Performance Test Reports	${f T}$
CEGS-16610		Materials and Equipment	M
CEGS-16610		Tests and Measurements	т, О
CEGS-16640		Shop Drawings	SD
CEGS-16640		Qualifications	Т, О
CEGS-16640		Anodes	M
CEGS-16640		Miscellaneous Materials	M
CEGS-16640		Tests and Measurements	Т, О
CEGS-16641		Shop Drawings	SD
CEGS-16641		Test Reports	Т, О
CEGS-16641		Impressed Current Anodes	M
CEGS-16641		Rectifiers and Associated Equipment	М
CEGS-16641		Miscellaneous Materials	M
CEGS-16641		Testing, Adjusting, and	т, о
CDCD 10011		Placing in Service	2, 0
CEGS-16642		Shop Drawings	SD
CEGS-16642		Test Reports	T, O
CEGS-16642		Impressed Current Anodes	M [°]
CEGS-16642		Rectifiers and Associated	W
		Equipment	
CEGS-16642		Coke Breeze	M
CEGS-16642		Miscellaneous Materials	M
CEGS-16642		Tests and Measurements	т, о

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	GUIDE SPEC	SPECIFICATION PARAGRAPH	DESCRIPTION OF	TYPE OF
-	NUMBER	NUMBER	MATERIAL	SUBMITIAL
	CEGS-16665		Shop Drawings	SD
	CEGS-16665		Test Reports	т, с
	G000 16650		Observation and the second	~
	CEGS-16670		Shop Drawings	SD
	CEGS-16670		Certificates of Compliance	C
	CEGS-16670		Materials	M
	CEGS-16710		Tests	T
			_	
	CEGS-16721		Shop Drawings	SD
	CEGS-16721		Installation Certificate	С
	CEGS-16721		Spare Parts Data	0
	CEGS-16721		Calculations	0
	CEGS-16721		Instructions	0
	CEGS-16721		Performance Test Reports	${f T}$
	CEGS-16721		Operation	M
	CEGS-16721		Overvoltage and Surge	M
			Protection	
	CEGS-16721		Control Panel	M
	CEGS-16721		Manual Fire Alarm Stations	M
	CEGS-16721		Fire Detecting Devices	M
	CEGS-16721		Annunciator Equipment	M
	CEGS-16721		Peripheral Equipment	M
	CEGS-16722		Shop Drawings	SD
	CEGS-16722 CEGS-16722		Listings and Approvals	C
			Data	Ö
	CEGS-16722			
	CEGS-16722		Instructions	0
	CEGS-16722		Calculations	O T
	CEGS-16722		Performance Test Reports Fire Alarm Transmitter	
	CEGS-16722			M
	CEGS-16722		Transmitter Interface Device	M
	CEGS-16722		Fire Alarm Monitoring	М
			-	

*****	MASTER	LISTING	OF	SUBMITTAL	S	*******
<pre>C = Certificate</pre>						Sample
G = Guarantee				SD	=	Shop Drawings
M = Manufacturer's D	ata			${f T}$	=	Test Report
0 = 0ther as Noted				*	=	If Amnlicable

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GUIDE SPEC	PARAGRAPH	DESCRIPTION OF	TY	PE OF
NUMBER	NOMBER	MATERIAL	SUE	MITTAL
		Base Station		
CEGS-16722		Peripheral Equipment		M
CEGS-16722		Overvoltage and Surge		M
		Protection		
CEGS-16722		Test		T
0000 1 C241		Proof of Compliance		
CEGS-16741		Proof of Compliance		C
CEGS-16741		Shop Drawings		SD, O
CEGS-16741		System Calculations		0
CEGS-16741		Test Plans		0
CEGS-16741		Test Reports		T
CEGS-16741		Manufacturer's Certificate		C
CEGS-16741		Manufacturer's Recommendations		0
CEGS-16741		Hardware		M
CEGS-16741		Digital Interface		M
CEGS~16741		Connector Blocks		W
CEGS-16741		Terminal Blocks		M
CEGS-16741		Standby Battery Cables		M
CEGS-16741				M
CEGS-16741		Instruments		M
CEGS-16741		Transmitter Receiver		M
CEGS-16741		Receiver		M
CEGS-16742		Shop Drawings		SD, O
CEGS-16742		Test Plans		0
CEGS-16742		Test Reports		T
CEGS-16742		Cable		M
CEGS-16760		Shop Drawings		SD, O
CEGS-16760		Inspection and Test Reports		T T
CEGS-16760		Intercom System Products		M
CEGS-16760		Inspection and Testing Reports		T
				-

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4	SPECIFICATIO	ON CONTRACTOR OF THE CONTRACTO	
GUIDE SPEC	PARAGRAPH	DESCRIPTION OF	TYPE OF
NUMBER	NUMBER	MATERIAL	SUBMITITAL
CEGS-16750		Shop Drawings	SD
CEGS-16750		Performance Test Reports	${f T}$
CEGS-16755		Shop Drawings	SD
CEGS-16755		Performance Test Reports	${f T}$
CEGS-16755		Materials and Equipment	M
CEGS-16755		Performance Test Reports	T
CEGS-16766		Shop Drawings	SD
CEGS-16766		Performance Test Reports	$ar{ extbf{T}}$
CEGS-16767		Shop Drawings	SD, O
CEGS-16767		Performance Test Reports	T T
CEGS-16767		Equipment and Components	M
CEGS-16767		Performance Test Reports	T
CEGS-16770		Shop Drawings	SD
CEGS-16770		Performance Test Reports	T
CEGS-16770		Materials and Equipment	M
CEGS-16770		Performance Test Reports	T
CEGS-16781		Shop Drawings	SD
CEGS-16781		Performance Test Reports	T
CEGS-16781		Headend Equipment	M
CEGS-16781		Cable Distribution Equipment	M
CEGS-16781		Performance Test Reports	T
CEGS-16790		Technical Data	О
CEGS-16790		Calculations	Ö
CEGS-16790		Manufacturer's Certifications	Č
CEGS-16790		Performance Verification	т, о
CIX30-10130		and Endurance Testing Data	1, 0
CEGS-16790		Operation and Maintenance Data	0
CEGS-16790		Training Data	0

******	MASTER LISTING OF	SUBMITTALS	******
<pre>C = Certificate</pre>		S =	Sample
G = Guarantee		SD =	Shop Drawings
M = Manufacturer's	Data		Test Report
0 = Other as Noted		* ==	If Applicable
*************	*******	*****	***********

* SPECIFICATION				
GUIDE SPEC	PARAGRAPH	DESCRIPTION OF	TYPE OF	
NUMBER	NUMBER	MATERIAL	SUBMITIZAL	
CEGS-16790		Surge Protection	М	
CEGS-16790		Status Display and Control	M	
		Panel		
CEGS-16792		FCC Certifications	С	
CEGS-16792		Wire Line Test Reports	T	
CEGS-16792		Contractor's Field Test Reports	${f T}$	
CEGS-16792		Manuals	0	
CEGS-16792		Functional Design Manual	0	
CEGS-16792		Hardware Manual	0	
CEGS-16792		Manufacturer's Repair Parts List	0	
CEGS-16792		Operation Manual	0	
CEGS-16792		Maintenance Manual	0	
CEGS-16794		FCC Certifications	С	
CEGS-16794		Field Test Reports	T	
CEGS-16794		Manuals	Ō	
CEGS-16794		Functional Design Manual	Ö	
CEGS-16794		Hardware Manual	Ŏ	
CEGS-16794		Manufacturer's Repair Parts	Ō	
		List		
CEGS-16794		Operation Manual	0	
CEGS-16794		Maintenance Manual	0	
CEGS-16795		FCC Certifications	С	
CEGS-16795		Field Test Reports	Ť	
CEGS-16795		Manuals	0	
CEGS-16795		Functional Design Manual	Ö	
CEGS-16795		Hardware Manual	0	
CEGS-16795		Manufacturer's Repair Parts	Ö	
		List		
CEGS-16795		Operation Manual	0	
CEGS-16795		Maintenance Manual	0	

****** MASTER	LISTING OF SUBMITTALS	*****
C = Certificate	S =	Sample
G = Guarantee	SD =	Shop Drawings
<pre>M = Manufacturer's Data</pre>	T =	Test Report
0 = Other as Noted	* =	If Applicable

THE MOST CURRENT GUIDE SPECIFICATIONS ARE AVAILABLE ON THE ELECTRONIC BULLETIN BOARD. THE INDEX IS UPDATED WEEKLY; CHECK THE BOARD FOR THE MOST UP-TO-DATE GUIDE SPECIFICATIONS. THE FOLLOWING LISTING IS PROVIDED AS GUIDANCE ONLY WHEN REQUESTING HARD COPIES. CONTACT YOUR PROJECT MANAGER FOR INSTRUCTRUCTIONS IF A NEW GUIDE SPECIFICATION DOES NOT APPEAR ON THE MASTER LISTING.

*	SPECIFICATIO	Ň	
GUIDE SPEC	PARAGRAPH	DESCRIPTION OF	TYPE OF
NUMBER	NOMBER	MATERIAL	SUBMITTAL
CEGS-16797		FCC Certifications	С
CEGS-16797		Test Report	${f T}$
CEGS-16797		Contractor's Field Test Report	T
CEGS-16797	· ·	Manuals	0
CEGS-16797		Functional Design Manual	0
CEGS-16797		Hardware Manual	0
CEGS-16797		Manufacturer's Repair Parts	0
	,	List	
CEGS-16797		Operation Manual	0
CEGS-16797		Maintenance Manual	
CEGS-16798		FCC Certifications	С
CEGS-16798		Test Report	T
CEGS-16798		Contractor's Field Test Report	T
CEGS-16798	-	Manuals	0
CEGS-16798		Functional Design Manual	0
CEGS-16798		Hardware Manual	0
CEGS-16798		Manufacturer's Repair Parts	0
	· · · · · · · · · · · · · · · · · · ·	List	
CEGS-16798		Operation Manual	0
CEGS-16798		Maintenance Manual	
CEGS-16855		Shop Drawings	SD
CEGS-16855		Cabinet Unit Heaters	M
CEGS-16855		Unit Heaters (Horizontal	M
		and Vertical Propeller Fan Type)	
CEGS-16855		Cabinet Convectors	M
CEGS-16855	· ·	Sill Convectors	W
CEGS-16855		Baseboard Radiation	M
CEGS-16855		Infrared Radiant Heaters	M

APPENDIX C

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TECHNICAL SPECIFICATIONS DIVISION



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TECHNICAL SPECIFICATIONS

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	Division 2 - Site Work
02201 02110 02232 02241	Excavation, Filing and Backfilling for Buildings Clearing and Grubbing Select Material Subbase Course Aggregate Base Course
	<u>Division 3 - Concrete</u>
03300	Concrete for Building Construction
	Division 4 - Masonry
04200	Masonry
	<u>Division 5 - Metals</u>
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	<u>Division 6 - Wood and Plastics</u>
06100 06200	Rough Carpentry Finish Carpentry
	Division 7 - Thermal and Moisture Protection
07112 07510 07600	Bituminous Waterproofing Built-Up Roofing Sheet Metalwork, General
	Division 8 - Doors and Windows
08110 08700	Steel Doors and Frames Hardware; Builders' (General Purpose)

Section	<u>Title</u>
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09200 09250 09510 09650 09900	Lathing and Plastering Gypsum Wallboard Acoustical Ceilings Resilient Flooring Painting, Ceneral
	<u>Division 10 - Specialties</u>
10160 10270 10430 10800	Toilet Partitions Raised Floor System Exterior Signage Accessories
	<u>Division 11 - Equipment</u>
11162	Loading Dock Leveler
	Division 12 - Furnishings
12390 12540	Kitchen Cabinets Venetian Blinds, Draw Curtains and Window Shades
	Division 13 - Special Construction
13120	Metal Buildings
	Division 14 - Conveying Systems
14580	Pneumatic-Tube System
	Division 15 ~ Mechanical
15250 15400 15690	Thermal Insulation for Mechanical Systems Plumbing, General Evaporative Cooling System

Division 16 - Electrical

16415	Electrical Work, Interior
16505	Protective Lighting System
16741	Telephone System, Inside Plant

* * * * *

-3-

NOTE: Divisions that are not used in project shall be as follows:

DIVISION 11 - Equipment

(Not Applicable)



ER 1110-345-720



DEPARTMENT OF THE ARMY U.S. Army Corps of Engineers Washington, D.C. 20314-1000

ER 1110-345-720

CEMP-ES

Regulation No. 1110-345-720

31 October 1989

Engineering and Design CONSTRUCTION SPECIFICATIONS

- 1. <u>Purpose</u>. This regulation prescribes policy and procedures for the preparation of the technical provisions of construction specifications for military construction.
- 2. <u>Applicability</u>. This regulation is applicable to all HQUSACE/OCE elements and all field operating activities (FOA) having military construction design responsibility.

3. References.

- a. Federal Acquisition Regulation (FAR), Subpart 10
- b. AR 415-11
- c. AR 415-15
- d. ER 415-1-10
- e. ER 415-1-11
- f. ER 715-1-10
- g. ER 1110-345-100
- h. ER 1110-345-710
- i. ER 1180-1-6
- j. EP 310-1-5
- k: AFR 88-15

4. Types of Specifications.

a. <u>Outline Specifications</u>. Outline specifications provide an outline form of construction requirements, and are used to help describe the design of structures and related facilities. They are used to supplement sketches, planning drawings, budgetary drawings, concept drawings, and/or design data.

- b. Guide Specifications. The HQUSACE guide specification system consists of a series of guide specifications directed toward various applications of military construction projects. Engineer Pamphlet, EP 310-1-5, is issued semiannually by HQUSACE to provide a current list of published guide specifications. The HQUSACE guide specifications define requirements for work features that occur in the construction of facilities on a repetitive basis. Guide specifications are prepared by or for HQUSACE and are distributed through normal publication channels. Guide specifications establish the form to be used for the technical provisions of construction specifications and, as far as practicable, the specific requirements to be included. Guide specifications reflect a standard of quality that will provide construction with a maximum of overall economy consistent with functional, aesthetic, and environmental requirements, energy conservation measures and sound architectural and engineering practices. The guide specifications are intended to promote uniformity of construction throughout the Corps and to provide a broad and open competition in procurement (FAR Subpart 10.002). The guide specifications have been coordinated with the commercial community and are revised and reissued periodically, as required to maintain state-of-the-art technology for military construction. The guide specifications also serve as convenient work sheets to be edited or tailored by specification writers preparing project specifications. Certain requirements in the guide specifications have general applicability to all projects, while other requirements that must vary from project to project have blanks to be filled in; optional words, phrases, or paragraphs to be chosen or deleted; or special paragraphs to be added.
- c. <u>Standard Specifications</u>. HQUSACE standard specifications are construction requirements, based on Corps of Engineers guide specifications, for a facility design that is part of a set of drawings and specifications intended for site adaptation at several locations. Standard specifications often include alternate assemblies or systems which are to be used as applicable to the geographical zones where the facility will be built. Standard specifications are prepared by or for HQUSACE, are updated periodically by the issuing offices, and are available with the standard drawings to which they apply (see AR 415-15 and ER 1110-345-710).
- d. <u>Project Specifications</u>. Project (or construction) specifications are construction requirements which apply to a specific facility at a specific location. Construction specifications will be based on HQUSACE guide specifications which have been edited to suit the specific requirements of the project to the extent such guide specifications exist.
- 5. <u>Preparation of Outline Specifications</u>. Outline specifications used for the budgetary phase will consist of a concise but clear-cut identification of applicable criteria, including guide specifications to be used. This may be done by reference, with notation of any exceptions thereto. Outline specifications for the concept design phase will identify the salient

features of construction, and will include a list of the sections proposed for the technical provisions, and a finish schedule for typical rooms.

6. Preparation of Project Specifications.

- General Requirements. Project specifications are developed by or for the Corps office responsible for the project, using HQUSACE guide specifications and standard specifications to the extent possible. Use of HQUSACE guide specifications in the preparation of project specifications is mandatory to the extent the guide specifications are applicable. The technical provisions will, when used with the contract drawings, provide a complete and comprehensive construction contract which can be bid on a fair and competitive basis and completely executed without change, except as necessary to deal with unforeseen conditions or to accomplish changes made during construction (see ER 1180-1-6 and ER 415-1-11 for guidance on biddability, constructibility, and operability reviews). Where a previous project design is adapted for use on a similar project, or where a project design has been completed but release to prospective bidders has been held in abeyance for a period of time exceeding six months, the specifications will be reviewed and revised as necessary to conform to the latest applicable HQUSACE guide specifications and the policy for their use. Where the project design is based on standard specifications, the standard specifications will be updated as required to reflect the requirements of current guide specifications.
- b. Specifications Prepared by Architect-Engineers. The division or district office will assist architect-engineer firms under contract to them in the selection of pertinent guide specifications and will provide copies of regulations, manuals, engineer technical letters, guide specifications, and other information as required (see ER 715-1-10). Previous project specifications or standard specifications for similar structures will be furnished only as samples of the form and content for completed work, except that they may be used as guides for sections for which applicable guides have not been issued, if the provisions therein are clearly applicable to the project and are in accord with current instructions.
- 7. Specification Format. Format of guide specifications is established through cooperative efforts of the military services and other Federal agencies and is based on construction industry recommendations promulgated by the Construction Specifications Institute (CSI). Project specifications will have the same format and the same section numbers as the HQUSACE guide specifications upon which they are based, or if no guide specification exists, they will be in the same format and the same writing style as the HQUSACE guide specifications and be numbered in conformance with the CSI MASTERFORMAT.
- 8. <u>Submittals of Technical Data and Samples</u>. Submittals of shop drawings, test reports, certificates, and samples will not be required for noncritical

items of relatively low value as compared to the cost of making the submittal; that is, a submittal will not be required when the cost will exceed the benefit to the project (see ER 415-1-10 for contractor submittal requirement). Avoidance of such submittal requirements is particularly encouraged for small projects. However, where guide specifications contain detailed technical submittal requirements necessary to insure performance, such provisions will be retained in the contract provisions.

- 9. Testing. Except where testing must be performed by the Government to ensure suitability, testing will be made the responsibility of the contractor under the Contractor Quality Control provisions (see ER 1180-1-6 for construction quality management). However, in preparing detailed specifications making testing the contractor's responsibility, the contract requirements will be written in such a way as not to abrogate the prerogative of the contracting officer to perform confirmation testing and quality assurance testing, when deemed advisable or to witness the testing by the contractor. Testing will be kept to a minimum and consistent with assuring quality of critical construction and cost control. However, under no circumstances should the cost of a test or the cost of the item being tested be considered as the sole criterion for determining the value of the test. Occasionally, the success or failure of a major portion of a project may be critically influenced by some small item; therefore, the overall benefit to the project should be used as the basis for determining the value of the test.
- 10. New Materials and Methods. New or untried materials or methods of construction will be specified only when their merits have been established and the materials or methods have been determined to fully meet criteria for the project. A handout is available for providing information on evaluation of new materials, equipment, and methods for construction; the evaluation handout may be given to producers and suppliers who present their products for inclusion in the HQUSACE guide specifications. Copies of the evaluation handout (Appendix A) may be obtained from HQUSACE (CEMP-ES).
- 11. Trade Names and Proprietary Items. As a general policy, the use of trade names, proprietary items, and the drafting of a specification based on a manufacturers's description of a particular commercial article will be avoided (see ER 1110-345-100 and FAR, Subpart 10.004). When it is necessary to specify materials or equipment other than by reference to a standard generally known to and used by the industry, minimum requirements will be stated in one of the following ways: either specify in terms of physical characteristics, chemical composition, laboratory test results, performance in actual use, or any combination of these as applicable, in such manner as to ensure full and free competition; or specify by use of trade names qualified by specific identification such as manufacturers' model numbers or catalog numbers, and further qualified with words "or approved equal". However, experience indicates that a "trade name or approved equal" description is appropriate only as a last resort and should be used with

great care and discretion; therefore, the project file will be documented to explain the necessity for using this approach in each instance it is used. Further, where the "trade name or approved equal" approach is used, the contract provisions will include those salient features of the item or items specified upon which equality will be determined.

- 12. Contractors' Options. Optional materials and methods of construction that are of a type and quality acceptable for military construction are included in applicable guide specifications and standard designs, as a means of increasing competition and reducing project costs. The optional materials listed in guide specifications are all part of the criteria for military construction, and contract specifications will include all optional products and materials contained in applicable guide or standard technical specifications. Additional options may be considered if a study of conditions affecting the project shows that it is in consonance with good engineering practice in that locality, is economically justifiable, and is in the best interest of the Government. Where such justification can be shown, the division commander may authorize additional options for specific projects. Where cumulative experience indicates that a change in standard options may be advisable, division commanders will forward their recommendations to HQUSACE (CEMP-ES) using ENG Form 3078, Recommended Changes to Engineering Documents.
- 13. <u>Guarantees</u>. Requirements for guarantees, beyond the normal one year warranty of construction period, will be specified only for materials, equipment or systems for which such longer guarantees are normally provided in the industry. Even then, the increased cost for the guarantee and the costs of administering and enforcing the guarantee must be evaluated, prior to specifying such guarantees.
- 14. Referenced Publications. Materials and equipment will be described, where possible, by reference to industry and Government standards, generally known to the industry, and by citing the type, class or other designation necessary to identify the product required. Reference standards will not be used to describe minor, noncritical items (such as incidental fasteners) when any commercially available product of that nature would be adequate. To the maximum extent practicable, such reference will be to nationally recognized industry and technical society specifications and standards. industry documents are unavailable or unsuitable, applicable Federal and military specifications and standards will be referenced, provided the materials are required to be of the quality described in those publications. References will be addressed to specific issues in all cases; where the designation does not include a revision letter or other specific identification, the date will be included. Interim Federal documents and limited-coordination military documents will not be referenced in place of approved documents, unless issued by an Army agency or DoD or unless such use has been authorized in a HQUSACE guide specification, notice or letter. Where it is necessary to modify the requirements of a Federal or military

document, by citing exceptions in the contract specifications and such modifications are repetitive, a request for a change in the referenced publication will be forwarded to HQUSACE (CEMP-ES). Publications not readily available to bidders, such as engineer regulations (ER), engineer technical letters (ETL), and technical manuals (TM), should not be referenced.

- 15. <u>Deviations of HQUSACE Guide Specifications</u>. It is recognized that the requirements in the guide specifications will not suit every project, and that the guide specifications must be tailored to fit the specific project requirements. Each guide specification contains notes providing guidance on use of the specification and the coordinations required with the other specification sections included in the project and with the project drawings. Great care must be taken to preserve the intent of the guide specifications. Since the HQUSACE guide specifications are coordinated with industry during their development, the specifications, therefore, represent an agreement with the commercial community regarding the level of performance that the Corps of Engineers will require on their construction projects. For that reason, it is important to retain the wording of the specifications to the extent practicable, since casual changes could negate past coordinations and benefits of past experience or may prove costly or embarrassing to the Corps. Where designer choices are provided in the guide specifications, great care must be exercised in making the proper choices for the project. Alteration of guide specifications to provide wording more suitable to the personal preference of the specification writer for a project is not authorized. Tailoring of a HQUSACE guide specification, either by a deletion or by an addition, is considered to be a deviation; therefore, the guidelines for deviations, as set forth below, will be applicable.
- a. <u>HQUSACE-Authorized Deviations</u>. The following deviations are authorized without reporting to HQUSACE:
- (1) Changes required or permitted by Department of the Army publications, HQUSACE publications, HQUSACE design directives or letters, or the "notes" section of the guide specifications.
 - (2) Deletion of inapplicable text material.
- (3) Insertion of additional text material which is necessary in order to properly specify the project involved.
- (4) For Air Force projects only, editing to comply with AR 415-11, the requirements of AFR 88-15 and other authorized criteria documents such as Air Force ETLs. For other non-Army projects, editing to comply with requirements of the non-Army agency.
- (5) Changes to reduce requirements for tests and submittals to minimum consistent with the scope, cost and importance of the work to be performed.

- (6) Changes to make testing the contractor's responsibility to the extent consistent with good practice.
- Deviations Reviewed and Approved by Division Commanders. HQUSACE-authorized deviations, changes will not be made to the HQUSACE guide specifications, unless appropriate to fit the specific project involved, and then only with the approval of the division commander. Consideration may be given to reasonable and practical deviations from established design criteria, including DoD criteria, when deemed appropriate for the specific project involved and approved by the division commander. Division commander review, prior to approval, will ensure that the deviation reflects sound engineering logic and complies with current regulations and procurement policies (see paragraph 4 of ER 1110-345-100 for limitations on deviation authority where safety, airfield and heliports, or diesel-engine generators are involved). Reporting to HQUSACE, in accordance with ER 1110-345-100. paragraph 4, will be required. Districts will take the necessary action to insure that any proposed deviation from criteria is specifically brought to the attention of the division commander at the earliest knowledgeable design phase, preferably at the time of submittal for review of concept design.
- Modified Versions of HQUSACE Guide Specifications. In overseas areas. modified versions of HQUSACE guide specifications may be necessary to fit local construction practices; consequently, preparation of such modified versions for repetitive use in overseas areas is authorized. In the United States, the preparation of modified versions of the HQUSACE guide specifications for repetitive use is expressly prohibited. However, this prohibition does not preclude preparation of special sections covering subjects for which no guide specifications exist. Any specification which is not exactly as issued by HQUSACE may not be called a Corps of Engineers guide specification (CEGS). Changing any part of a CEGS and reproducing the changes documents with a designation of CEGS is strictly prohibited, as is the development of a local guide specification and using "CEGS" as part of the document identification. When considered necessary, local specifications covering items not included in the HQUSACE guide specifications may be developed for local use, in which event a copy of such specifications will be furnished to HQUSACE (CEMP-ES) for information and possible adoption as a CEGS.
- 17. <u>Separate Notes for Local Requirements</u>. When considered necessary, CEGS may be supplemented with instructions or notes pertaining to local usage of the guide specifications necessary for accomplishment of projects in their area. Separate notes issued for use as supplement to the CEGS must be approved by the division commander and submitted to HQUSACE (CEMP-ES) for information.
- 18. <u>Notices to Guide Specifications</u>. Changes to CEGS-series guide specifications in the form of Notices are published, when necessary to make

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technical changes and update publication references in the guide specifications. A specific publication issue referenced in project specifications need be no later than in the current Notice for the applicable guide specifications, and date of the reference need not be included where the specific issue is otherwise identified. After initial distribution, local reproduction by office copying machine is authorized when needed.

- 19. Use of Automated Methods. The SPECSINTACT automated system for the preparation of project specifications has been adopted by the Corps of Engineers and various other military and civil Federal agencies as the means for producing and maintaining their guide specifications systems and to provide the state-of-the-art specification automation to users. Also, the agencies involved make their individual guide specifications data bases available to each other through compact disk and magnetic media services. This cooperative effort is intended to provide greater uniformity and better transportability of guide specifications, to provide a more economical means of producing project specifications, and to make it easier to use guide specifications of other agencies, when a corresponding guide specification does not exist in an agency system. The HQUSACE guide specifications have been converted to be fully compatible with SPECSINTACT, and FOA are encouraged to start using the system immediately. It is expected that within approximately two years all Corps project specifications will be produced through the system. SPECSINTACT includes a wide range of automated functions, and these functions are continually being refined and expanded to better serve the user.
- 20. <u>Recommended Changes</u>. HQUSACE welcomes proposals for technical or editorial change that are necessary or desirable either for general application or to adequately reflect local availability of materials and local construction practice. Such proposals will be addressed to HQUSACE (CEMP-ES) by submitting ENG Form 3078 in accordance with ER 1110-345-100.

FOR THE COMMANDER:

1 Appendix App A-Evaluation Handout ALBERT J. ENETTI, JR. Colonel, corps of Engineers Chief of Staff

APPENDIX A

EVALUATION HANDOUT

CRITERIA AND FORMAT FOR
SUBMISSION AND EVALUATION OF MATERIALS,
EQUIPMENT, AND METHODS
FOR
INCLUSION IN GUIDE SPECIFICATIONS
USED FOR MILITARY CONSTRUCTION

- 1. <u>General</u>. Of the many construction materials, equipment and methods being developed, some may be employed profitably in the military construction program. It is the policy of the military department to specify for military construction those materials, equipment and methods that will provide construction with a maximum of over-all economy consistent with functional, aesthetic, and environmental requirements, energy conservation measures and sound architectural and engineering practice. Materials, equipment and methods will be utilized that will result in low cost, with due consideration to economical maintenance for the required use and life expected of the facility. Where possible, materials, equipment and methods specified will be those used in the civilian construction industry that have met this objective.
- 2. <u>Guide Specifications</u>. Guide specifications issued by the military department specify the materials, equipment and methods considered adequate to meet military construction requirements. The procedure outlined below establishes the criteria for selecting new and/or improved materials, equipment and methods for military construction. Representatives of industry in proposing new items for consideration for inclusion in the guide specifications for military construction will be required to adhere to the criteria.
- 3. Prerequisites for Consideration of New Materials, Equipment and Methods.
- a. A new product or method proposed by a manufacturer for inclusion in the guide specifications must meet the following prerequisites:
- (1) The items must equal or exceed the minimum standard for quality and/or performance currently included in the guide specifications.
- (2) The in-place cost of the item must be such that it can compete with other acceptable products; or, the premium cost of the item must be justified in valid, demonstrable terms of long-range savings in cost or maintenance or operations.
- (3) The item must be readily available in quantity and in wide geographical areas.

- (4) The merits of the item must be substantiated by results of certified tests by an approved laboratory or by evidence of satisfactory use under conditions similar to the application being proposed for military construction.
- (5) Manufacturing processes and installation techniques must be such as to insure satisfactory quality control without excessive inspection costs to the Government.
- (6) A proposed product must lead itself to the preparation of a specification that will be adequate to insure required results and yet be nonrestrictive enough to admit other available and equally acceptable products.
- b. Certain products are so limited in availability or usage that they have application only in localized areas. If such products meet the other prerequisites listed above, they may be considered by military departments field offices for use on specific projects subject to the approval of the military department headquarters.
- 4. Submission of and Use of Data Proposed. Requests for the inclusion of new products in the guide specifications should be directed to the headquarters office of each individual military department that the manufacturer has an interest in having his product used (see attached list for proper addresses). It is not necessary to make inquiry at a higher level, through Congressional channels. All requests shall be accompanied by an orderly presentation of data conforming to the attached format, or as CSI Specification Data Sheets with supplemental data of a non-proprietary nature required by the attached, at the manufacturer's option. If the product is not favorably considered, the manufacturer will be so informed with the reasons therefore. If it is decided to include the product in the future, or revised the guide specifications, and the product is not described by an adequate nonrestrictive specification, it shall be the responsibility of the manufacturer to prepare such specification data. Inclusion in the guide specifications may not be used as a basis for advertising claims or similar publicity. It is emphasized that favorable consideration of a product with respect to the military guide specifications does not constitute approval of the product for any given construction project. In the case of each project, the express provisions of the contract documents govern, and strict adherence to the contract specifications is required after opening of bids.
- 5. Modification of Existing Specifications. Manufacturers have a definite responsibility to keep the military departments' construction agencies fully informed of any changes in design and manufacturer of construction components already included in the guide specifications. Request for consideration of each change shall be made in the manner outlined above.

FORMAT FOR PRESENTATION OF PRODUCT DATA

1. PRODUCT NAME.

Give both proprietary and non-proprietary generic name.

2. MANUFACTURER.

Give name and address of manufacturer and name and telephone number of Washington, D.C. technical representative. Where no local representative is available, give name, address and telephone number of person to be contacted for technical discussions.

3. PRODUCT DESCRIPTION.

This should include succinct but accurate statements outlining a product where applicable:

- a. Basic use
- b. Limitations
- c. Composition
- d. Components
- e. Sizes and shapes
- f. Accessories
- g. Finishes
- h. Colors
- i. Reference standards applicable (i.e., ASTM, ANSI, etc.)

4. TECHNICAL DATA.

Give physical and chemical data, test reports, etc.

5. <u>INSTALLATION</u>.

Give brief description of installation techniques required to be followed.

6. AVAILABILITY AND COST.

Indicate material and labor cost to enable determination if the material, etc., is applicable to construction from an economic standpoint.



DESCRIPTION OF ADDITIVE BID ITEMS



Spec. No.

INDEX

SECTION 01010

DESCRIPTION OF ADDITIVE BID ITEMS

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2.	Additive	Item No.	A2,	Pedestrian Underpass	01010-1
3.	Additive	Item No.	A3,	Insulation of Precast	
	Concrete	Valls			01010-1
4.	Additive	Item No.	A4,	LP Gas Standby System	01010-1
5.	Additive	Item No.	A5,	Sprinkling and Landscaping	01010-1

NOTE: Reminder portion of CQC paragraph is added to Section 01010

SECTION 01010

DESCRIPTION OF ADDITIVE BID ITEMS

- 1. ADDITIVE ITEM NO. A1, PARKING AREA AND DRIVEVAY: Extent of work shall be as shown on drawings Sheet 6 (C-1), Sheet 9 (C-4), and 235 (E-40) and shall include 429 stall parking area with 3 connecting driveways to South Gate Drive and 11th Street, parking lot lighting system, and conduits and wiring originating from panel LK inside pedestrian underpass and miscellaneous demolition items.
- 2. ADDITIVE ITEM NO A2, PEDESTRIAN UNDERPASS: Extent of work shall be as shown on drawing Sheet 9 (C-4), Sheet 12 (C-7), Sheet 18 (C-13), Sheet 227 (E-32) and Sheet 235 (E-40) and shall include the complete pedestrian underpass structure, lighting and drainage system, snow melting system, 8° drainage pipe to existing catch basin, panels, underground feeder from T6 to T7 and transformer 17.
- 3. ADDITIVE ITEM NO A3, INSULATION OF PRECAST CONCRETE VALLS: Provide under this item furring channels, fasteners, gypsum cover board, plywood wainscot and miscellaneous metal closures at top and bottom of insulation as shown on the drawings and as specified in SECTION: ROUGH CARPENTRY. This item shall also include exterior wall insulation between precast wall panels and 8° CMU inner walls. Provide paint as per SECTION: PAINTING, GENERAL over exposed precast wall panels under the base bid. Painting work shall be deleted in lieu of painting gypsum board and plywood if this item is accepted.
- 4. ADDITIVE ITEM NO. A4, LP GAS STANDBY SYSTEM: Extent of work shall be as shown on Sheet 17 (C-12) and shall include the complete LP Gas Standby System, fencing, concrete saddles for LP storage tank, bulkhead, steam supply, condensate discharge, drywell and foundation slab for vaporizer. Natural gas piping system shall not be part of this item.
- 5. ADDITIVE ITEM NO. A5, SPRINKLING AND LANDSCAPING: Provide under Additive Sprinkling as shown on the drawings, Sheet 19 (C-14). Provide capped tees on the 6" water service line in the three branch line locations Sheet 19 (C-14). Provide under Additive Landscaping as shown on the drawings, Sheet 21 (C-16). Provide fill as the planting areas up to bottom level of topsoil under the base bid.

- REMINDER -

Located at the front of these specifications are the Contract Clauses, Special Clauses and Division I GENERAL REQUIREMENTS of the Technical Specifications, which apply to every aspect of this contract including the work in this section whether performed by Prime Contractor, subcontractor, or supplier.

01010-1

APPENDIES J

PREPARED FINAL PROJECT SPECIFICATION



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Appendix J - EXAMPLE ONLY

SECTION 05120

STRUCTURAL STEEL

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)

AISC 326	(Nov 1, 1978, with Commentary) Specification for the Design, Fabrication and Erection of Structural Steel for Buildings
AISC S302	(Feb 1987) Code of Standard Practice for Steel Buildings and Bridges
AISC S329	(Jul 1986) Specification for Structural Joints Using ASTM A 325 or ASTM A 490 Bolts
AMERICAN NAT	IONAL STANDARDS INSTITUTE, INC (ANSI)

WAST DI	.0.22.1	(+ 200)	L.	T30T)	Eratir	# # 211CT 2	

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM A 6	(1988c) Rolled Steel Plates, Shapes, Sheet Piling, and Bars for Structural Use
ASTM A 36	(1988c) Structural Steel
ASTM A 53	(1988a) Pipe, Steel, Black and Hot-Dipped, Zinc-Coated Welded and Seamless
ASTM A 242	1988) High-Strength Low-Alloy Structural Steel
ASTM A 307	(1988a) Carbon Steel Bolts and Studs, 60,000 psi, Tensile Strength

ASTM	A	325	(1988a) High-Strength Bolts for Structural Steel Joints
ASTM	A	441	(1985) High-Strength Low-Alloy Structural Manganese Vanadium Steel
ASTM .	A	490	(1988a) Heat-Treated Steel Structural Bolts, 150 ksi Minimum Tensile Strength
ASTM	A	500	(1984) Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes
ASTM	A	501	(1988) Hot-Formed Welded and Seamless Carbon Steel Structural Tubing
ASTM	A	502	(1983a; R 1988) Steel Structural Rivets
ASTM .	A	514	(1988) High-Yield-Strength, Quenched and Tempered Alloy Steel Plate, Suitable for Welding
ASTM	A	529	(1988) Structural Steel with 42 ksi (290 MPa) Minimum Yield Point (1/2 In. (13 mm) Maximum Thickness)
ASTM	A	563	(1988a) Carbon and Alloy Steel Nuts
ASTM	A	572	(1988c) High-Strength Low-Alloy Columbium-Vanadium Steels of Structural Quality
ASTM	A	588	(1988a) High-Strength Low-Alloy Structural Steel with 50 ksi (345 MPa) Minimum Yield Point to 4 In. (100 mm) Thick
ASTM .	A	618	(1988) Hot-Formed Welded and Seamless High-Strength Low-Alloy Structural Tubing
AM	ER	CICAN SOCIE	TY OF MECHANICAL ENGINEERS (ASME)

ASME B46.1 (1985) Surface Texture (Surface Roughness, Waviness and Lay)

AMERICAN WELDING SOCIETY (AWS)

AWS D1.1 (1988) Structural Welding Code - Steel

FEDERAL SPECIFICATIONS (FS)

FS TT-P-86 (Rev H) Paint, Red-Lead-Base,

Ready-Mixed

FS TT-P-615 (Rev D; Am 3) Primer Coating: Basic

Lead Silico Chromate, Ready Mixed

FS TT-P-645 (Rev A) Primer, Paint, Zinc-Chromate,

Alkyd Type

1.3 GENERAL REQUIREMENTS

The AISC 326 shall govern the work. Welding shall be in accordance with AWS D1.1. High-strength bolting shall be in accordance with the AISC S329.

1.4 SUBMITTALS

The following shall be submitted in accordance with Section 01300 SUBMITTALS:

SD-31, Detail Drawings

Detail drawings shall include all shop and erection details. Members and connections for any portion of the structure not shown on the contract drawings shall be detailed by the fabricator and indicated on the detail drawings. All welds shall be indicated by standard welding symbols of the AWS D1.1.

SD-50, Sample

If so requested, random samples of bolts, nuts, and washers as delivered to the job site shall be taken in the presence of the Contracting Officer and provided to the Contracting Officer for testing to establish compliance with specified requirements.

SD-62, Work Plan

Prior to erection, an erection plan of the structural steel framing is required. This erection plan shall conform to the requirements of the AISC S302. The erection plan shall describe all necessary temporary supports, including the sequence of installation and removal.

SD-76, Certificates of Compliance

Certified copies of mill test reports for structural steel, structural bolts, nuts, washers and other related structural steel items shall be provided. Certified copies of welders qualification test records showing qualification in accordance with AWS D1.1 shall be provided. A

copy of the AISC certificate indicating that the fabrication plant meets the specified structural steelwork category shall be provided.

1.5 STORAGE

Material shall be stored out of contact with the ground in such manner and location as will minimize deterioration.

1.6 RESPONSIBILITY FOR ERRORS

The Contractor shall be responsible for all errors of detailing, fabricating, and for the correct fitting of the structural members.

PART 2 PRODUCTS

- 2.1 STRUCTURAL STEEL
- 2.1.1 Carbon Grade Steel

Carbon grade steel shall conform to ASTM A 36.

2.1.2 High-Strength Low-Alloy Steel

High-strength low-alloy steel shall conform to ASTM A 441.

2.1.3 Corrosion-Resistant High-Strength Low-Alloy Steel

Corrosion-resistant steel shall conform to ASTM A 242.

2.1.4 Quenched and Tempered Alloy Steel

Tempered alloy steel shall conform to ASTM A 514.

2.2 STRUCTURAL TUBING

Structural tubing shall conform to ASTM A 500.

2.3 STEEL PIPE

Steel pipe shall conform to ASTM A 53, Type S, Grade B.

2.4 RIVETS

Rivets shall conform to ASTM A 502, Grade B.

2.5 HIGH-STRENGTH BOLTS

High-strength bolts shall conform to ASTM A 325, including nuts and washers.

2.6 CARBON STEEL BOLTS

Carbon steel bolts shall conform to ASTM A 307, Grade A.

2.7 CARBON STEEL NUTS

Carbon steel nuts shall conform to ASTM A 563, Grade A, Square Style.

2.8 WASHERS

Plain washers, other than those in contact with high-strength bolts shall conform to ANSI B18.22.1, Type B.

2.9 PAINT

Paint shall conform to FS TT-P-86, Type I or II; FS TT-P-615, Type I, II, or V; or FS TT-P-645.

PART 3 EXECUTION

3.1 FABRICATION

Fabrication shall be in accordance with the applicable provisions of the AISC 326. Fabrication and assembly shall be done in the shop to the greatest extent possible. The fabricating plant shall be qualified under the AISC quality certification program for Category I structural steelwork. Compression joints depending on contact bearing shall have a surface roughness not in excess of 500 micro inches as determined by ASME B46.1, and ends shall be square within the tolerances for milled ends specified in ASTM A 6. Structural steelwork, except surfaces of steel to be encased in concrete, surfaces to be field welded, surfaces to be fireproofed, [and contact surfaces of friction-type high-strength bolted connections] shall be prepared for painting in accordance with the AISC 326 and primed with the specified paint.

3.2 ERECTION

Erection of structural steel shall be in accordance with the applicable provisions of the AISC 326.

3.2.1 Connections

Anchor bolts and other connections between the structural steel and foundations shall be provided and shall be properly located and built into connecting work.

3.2.2 Base Plates and Bearing Plates

Column base plates for columns and bearing plates for beams, girders, and similar members shall be provided. Base plates and bearing plates shall be provided with full bearing after the supported members have been plumbed and properly positioned, but prior to placing superimposed loads. Separate setting plates under column base plates will not be permitted. The area under the plate shall be damp-packed solidly with bedding mortar, except where expansive grout is indicated on the drawings. Bedding mortar and grout shall be as specified in Section 03300 CONCRETE FOR BUILDING CONSTRUCTION.

3.2.3 Field Welded Connections

Field welded structural connections shall be completed before load is applied.

3.2.4 Field Priming

After erection, the field bolt heads and nuts, field welds, and any abrasions in the shop coat shall be cleaned and primed with paint of the same quality as that used for the shop coat.

APPENDER IS

CONSTRUCTION QUALITY CONTROL PARAGRAPH



8. CONSTRUCTION QUALITY CONTROL: Attention is directed to SECTION: CONSTRUCTION QUALITY CONTROL which requires the Contractor to perform quality control inspection, testing, and reporting.

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- REMINDER -

Located at the front of these specifications are the Contract Clauses, Special Clauses and Division I GENERAL REQUIREMENTS of the Technical Specifications, which apply to every aspect of this contract including the work in this section whether performed by Prime Contractor, subcontractor, or supplier.

ITEM I

Spec. No.

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SECTION 02100

CLEARING AND GRUBBING

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6.	DISPOSAL OF MATERIALS		02100-2
7.	CONSTRUCTION QUALITY CONTROL		02100-2

NOTE: "Redline", "Strikout", or any other electronic method of showing revisions may be used.

APPENDIX L

AMENDMENT

ITEMS 1 THROUGH 8



Spec. No.

SECTION 02100

CLEARING AND GRUBBING

PART 1 - GENERAL

1. DEFINITIONS:

- 1.1 <u>Clearing</u>: Clearing shall consist of the felling, trimming, and cutting of trees into sections and the satisfactory disposal of the trees and other vegetation designated for removal, including down timber, snags, brush, and rubbish occurring within the areas to be cleared.
- 1.2 <u>Grubbing</u>: Grubbing shall consist of the removal and disposal of stumps, roots larger than 3 inches in diameter, and matted roots from the designated grubbing areas.

2. MEASUREMENT:

- 2.1 <u>Clearing</u>: Clearing will be measured in acres of clearing actually performed. Areas of light brush, shrubs, and other vegetation that can be cut with a brush hook, scythe, or moving machine will not be measured as clearing.
- 2.2 <u>Grubbing</u>: Grubbing will be measured in acres of grubbing actually performed. Areas of light brush, shrubs, and other vegetation that can be cut with a brush hook, scythe, or moving machine will not be measured as clearing.
- 2.3 <u>Clearing and Grubbing</u>: Clearing and grubbing will be measured in acres of clearing and grubbing actually performed.
- 2.4 <u>Tree Removal</u>: Tree removal will be measured by the number of trees of stated sizes removed from areas outside the clearing and grubbing areas. The size will be determined by the average diameter of the trunk 4 feet above the ground line. The size of stumps designated for removal as trees will be determined by the diameter of the trunk 4 feet above the ground line. The diameter will be measured to the nearest full inch.

3. PAYMENT:

- 3.1 Clearing: Payment will be made at the contract unit price per acre for clearing, and this price shall constitute full compensation for all labor, equipment, tools, and incidentals necessary to complete the work specified herein.
- 3.2 <u>Grubbing</u>: Payment will be made at the contract unit price per acre for grubbing, and this price shall constitute full compensation for all labor, equipment, tools, and incidentals necessary to complete the work specified herein.

Encl 3 to Amend No. 0001

- 3.3 <u>Clearing and Grubbing</u>: Payment will be made at the contract unit price for clearing and grubbing, and this price shall constitute full compensation for all labor, equipment, tools, and incidentals necessary to complete the work specified herein.
- 3.4 <u>Tree Removal</u>: Payment for tree removal will be made at the contract unit price for removing trees, or stumps designated as trees, that are outside the area designated for clearing or grubbing in accordance with the following schedule of sizes.

PART 2 - EXECUTION

- 4. CLEARING: Trees, stumps, roots, brush, and other vegetation in areas to be cleared shall be cut off flush with or below the original ground surface, except such trees and vegetation as may be indicated or directed to be left standing. Trees designated to be left standing within the cleared areas shall be trimmed of dead branches 1-1/2 inches or more in diameter and shall be trimmed of all branches the heights indicated or directed. Limbs and branches to be trimmed shall be neatly cut close to the bole of the tree or main branches. Cuts more than 1-1/2 inches in diameter shall be painted with an approved tree-wound paint. Trees and vegetation to be left standing shall be protected from damage incident to clearing, grubbing, and construction operations by the erection of barriers or by such other means as the circumstances require. ***** Clearing shall also include the removal and disposal of structures that obtrude, encroach upon, or otherwise obstruct the work.
- 5. GRUBBING: Material to be grubbed, together with logs and other organic or metallic debris not suitable for foundation purposes, shall be removed to a depth of not less than 18 inches below the original surface level of the ground in areas indicated to be grubbed and in areas indicated as construction areas under this contract, such as areas for buildings, and areas to be paved. Depressions made by grubbing shall be filled with suitable material and compacted to make the surface conform with the original adjacent surface to the ground.

6. DISPOSAL OF MATERIALS:

- 6.1 Salable Timber: All felled timber from which saw logs, pulpwood, posts, poles, ties, mine props, or cordwood can be produced shall be considered as salable timber, and shall be trimmed of limbs and tops, sawed into salable lengths of ***** feet, and stockpiled at locations as directed. The disposal of the stockpiled timber will be by the Government.
- 6.2 Burning or Removing From Site: Logs, stumps, roots, brush, rotten wood, and other refuse from the clearing and grubbing operations, except for salable timer, shall be burned, except when otherwise approved in writing. Such permission will state the conditions covering the disposal of such products and will also state the areas in which they may be placed. Permission to dispose of such products on private property shall be in writing, and a copy of this permit shall be filed with the Contracting Officer. Refuse to be burned shall be burned

at locations as directed and in a manner to prevent damage to existing structures and appurtenances, construction in progress, trees, and other vegetation. The Contractor shall be responsible for compliance with all Federal and State laws and regulations and with reasonable practice relative to the building of fires. Burning or other disposal of refuse and debris and any accidental loss or damage attendant thereto shall be the Contractor's responsibility.

7. CONSTRUCTION QUALITY CONTROL: Attention is directed to SECTION: CONSTRUCTION QUALITY CONTROL which requires the Contractor to perform quality control inspection, testing, and reporting.

- REMINDER -

Located at the front of these specifications are the Contract Clauses, Special Clauses and Division I GENERAL REQUIREMENTS of the Technical Specifications, which apply to every aspect of this contract including the work in this section whether performed by Prime Contractor, subcontractor, or supplier.

Encl 3 to Amend No. 0001

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SECTION 05120

STRUCTURAL STEEL

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r	6.	Deleted	
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Spec. No.

SECTION 15200

SEISHIC PROTECTION FOR MECHANICAL, ELECTRICAL EQUIPMENT

PART 1 - GENERAL

- 1. APPLICABLE PUBLICATIONS: The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.
- 1.1 Federal Specifications (Fed. Spec.):

RR-V-410D(1)

Wire Rope and Strand

1.2 American National Standards Institute, Inc. (ANSI) Standards:

B18.2.1-1981

Square and Hex Bolts and Screws Inch

Series

B18.2.2-1987

Square and Hex Nuts (Inch Series)

1.3 American Society for Testing and Materials (ASTM) Publications:

A 36-88

Structural Steel

A 325-86a

High-Strength Bolts for Structural Steel Joints

Steel Joint

1.4 National Fire Protection Association (NFPA) Standard:

13-1987

Installation of Sprinkler Systems

1.6 The Sheet Metal Industry Fund of Los Angles, California:

SMIF & PPIC

(1982)

Guidelines for Seismic Restraints of Mechanical and Plumbing Piping Systems

Encl 1 to Amend No. 0001

15200-1

Spec. No.

- GENERAL: The requirements for seismic protection measures to
 be applied to mechanical/electrical and systems specified herein.
 - 2.1 Deleted

2.2 <u>Mechanical Systems</u>: Mechanical systems shall include the following items to the extent required on plans or in other sections of these specifications:

Chilled Water Distribution Systems Outside of Buildings Gas Distribution Systems Oil Piping Outside of Buildings Water Supply Systems Sanitary Sewer Systems

- 2.3 Zone: This facility is located in Seismic Zone 3.
- 2.4 Exclusion: Seismic protection of water pipes for fire protection systems will be installed in strict accordance with the provisions of NFPA 13 and Appendix A thereto as specified in SECTION: SPRINKLER SYSTEMS, FIRE PROTECTION.
- 2.5 <u>Pipes and Ducts That Do Not Require Special Seismic Restraints:</u> Seismic restraints may be omitted from the following installations:
 - a. Gas piping less than 1-inch inside diameter.
- b. Piping in boiler and mechanical equipment rooms less than 1-1/4 inches inside diameter.

Encl 1 to Amend No. 0002

13.2.2 Lateral Support: In lieu of the design criteria
stated above, where ceiling loads do not exceed 4 psf, lateral
support for the ceiling system may be provided by four wires o
minimum No. 12 gage, splayed in four directions, 90 degrees
apart, and connected to the main runner with 2 inches of the
cross runner and to the structure above at an angle not exceed

— 13.3 Deleted —
-13.3.1 Deleted

- 13.4 <u>Air diffusers</u> that weigh not more than 20 pounds and that receive no tributary loading from ductwork may be positively attached to and supported by the ceiling runners.
- 14. MISCELLANEOUS EQUIPMENT: The following specific items of equipment to be furnished under this contract shall be constructed and assembled so as to be capable of withstanding the horizontal equivalent static force of 0.23 times the operating weight of the equipment.

Miscellaneous Equipment

Boilers Switch Boards

15. CONSTRUCTION QUALITY CONTROL: Attention is directed to SECTION: CONSTRUCTION QUALITY CONTROL which requires the Contractor to perform quality control inspection, testing, and reporting.

- REMINDER -

Located at the front of these specifications are the Contract Clauses, Special Clauses and Division I GENERAL REQUIREMENTS of the Technical Specifications, which apply to every aspect of this contract including the work in this section whether performed by Prime Contractor, subcontractor or supplier.

Encl 1 to Amend No. 0002

Spec. No.

SECTION 05120

STRUCTURAL STEEL

PART 1 - GENERAL

1. APPLICABLE PUBLICATIONS: Some or all of the publications referred to hereinafter form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

1.1 Steel Structures Painting Council (SSPC) Specifications:

SSPC-Paint 6-82 Zinc Dust, Zinc Oxide, Ram Linseed Oil and

Phenolic Varnish Paint (For Steel and

Galvanized Surfaces)

SSPC-Paint 25-82 Red Iron Oxide, Zinc Oxide, Raw Linseed Oil

and Alkyd Primer (Without Lead and Chromate

Pigments)

1.2 American Institute of Steel Construction (AISC) Publications:

Code of Standard Practice for Buildings and Bridges (Sep 1, 1986, with Commentary)

Specification for the Design, Fabrication and Erection of Structural Steel for Buildings (Nov 1, 1978, with Commentary

Specification for Structural Joints Using ASTM A 325 or A 490 Bolts (Nov 13, 1985).

1.3 American National Standards Institute (ANSI) Standard:

B18.22.1-1965(R 1981)

Plain Washers.

B46.1-1978

Surface Texture (Surface Roughness,

Waviness and Lay).

1.4 American Society for Testing and Materials (ASTM) Specifications:

A 6-88

General Requirements for Rolled Steel Plates, Shapes, Sheet Piling and Bars for Structural Use.

Encl 1 to Amend No. 0001

05120-1 (next page is 05120-1a)

ITEM 6

	Spec. No.
A 441-85	High-Strength Low-Alloy Structural Manganese Vanadium Steel.
A 490-85	Heat-Treated Steel Structural Bolts, 150 ksi Tminimum Tensile Strength.
A 500-84	Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes.

Encl 1 to Amend No. 0001

Spec. No.

2. GENERAL REQUIREMENTS: The AISC Specification for the Design, Fabrication and Erection of Structural Steel for Buildings shall govern the work. All welding including, but not limited to, design of welded connections, workmanship, technique, qualification, and inspection, shall be in accordance with AWS D1.1, except the term "Inspector" shall be redefined to be a member of the Contractor's quality control system. High-strength bolting shall be in accordance with the AISC Specification for Structural Joints Using ASTM A 325 or A 490 Bolts.

3. SUBMITTALS:

- 3.1 <u>Certificates of Compliance</u>: Certificates of compliance shall be submitted in accordance with the SPECIAL CLAUSES. Certified copies of mill test reports shall be furnished for structural steel. Certification that each welder is qualified in accordance with AWS Code Dl.1 shall be provided.
- 3.2 <u>Shop Drawings</u>: Shop drawings shall be submitted for approval in accordance with the SPECIAL CLAUSES. Drawings shall include all shop and erection details. Members and connections for any portion of the structure not shown on the contract drawings shall be detailed by the fabricator and indicated on the shop drawings. All welds shall be indicated by standard welding symbols of the AWS.
- 3.2a Erection Plan: Prior to erection, the Contractor shall submit an erection plan of the structural steel framing. This erection plan shall conform to the requirements of the ATSC Code of Standard Practice for Steel Builldings and Bridges. The erection plan shall describe all necessary temporary supports, including the sequence of installation and removal.
- 4. RESPONSIBILITY FOR ERRORS: The Contractor shall be responsible for all errors of detailing, fabrication, and for the correct fitting of the structural members.
- 5. STORAGE: Material shall be stored out of contact with the ground in such manner and location as will minimize deterioration.

PART 2 - PRODUCTS

- 6. MATERIALS: Materials shall conform to the following requirements:
- 6.1 Structural Steel:
- 6.1.1 Carbon Grade Steel: ASTM A 36.

5.1.2 Deleted

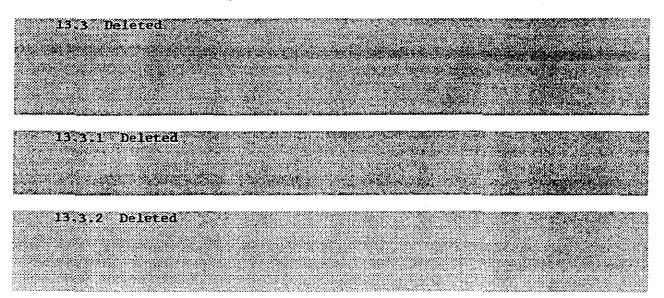
Encl 1 to Amend No. 0002

Spec. No.

- 13. SUSPENDED CEILING ASSEMBLIES: The structural members of ceiling systems used primarily to support acoustical panels or acoustical panel lay in tiles, with or without lighting fixtures, ceiling-mounted air terminals, and ceiling mounted services, shall conform to the following:
- 13.1 <u>Design Criteria</u>: All ceiling structural systems shall be designed to withstand required vertical load as well as a lateral force of 23 percent of the ceiling weight. The ceiling weight shall include all lighting fixtures and other equipment that are laterally supported by the ceiling and shall be not less than 4 psf.
- 13.1.1 Exception: Ceiling areas of 144 square feet or less surrounded by walls that connect directly to the structure above shall be exempt from unilateral-load standards.

13.2 Minimum Installation Requirements:

13.2.1 Vertical Support: Hangers wires supporting a maximum tributary ceiling area of 16 square feet shall be a minimum of 12-gage in diameter. The size of wires supporting a tributary ceiling area of greater than 16 square feet shall be substantiated by design calculations. Hanger attachment devices used in ceiling systems not exceeding 4 psf shall be capable of supporting a minimum allowable load of 100 pounds. Hanger attachment devices used in ceiling systems exceeding 4 psf shall be capable of supporting the design load and shall be substantiated by design calculations. Hangers shall be plumb and shall not attach to or bend around interfering duct pipes or similar obstructions. If hangers must be splayed more than one horizontal to six vertical, the resulting horizontal force shall be offset by bracing.



PUBLISHER LISTING

FOR OTHER SPECIFICATIONS AND STANDARDS



AIR-CONDITIONING AND REFRIGERATION INSTITUTE (ARI) 1501 Wilson Boulevard, Suite 600, Arlington VA 22209 Phone (703) 524-8800, Telefax (703) 528-3816

AIR-CONDITIONING CONTRACTORS OF AMERICA (ACCA) 1513 16th Street, Washington DC 20036 Phone (202) 483-9370

AIR DIFFUSION COUNCIL (ADC)
230 North Michigan Avenue, Suite 1200, Chicago, IL 60601
Phone (312) 372-9800

AIR MOVEMENT AND CONTROL ASSOCIATION, INC (AMCA)
30 West University Drive, Arlington Heights, IL 60004
Phone (312) 394-0150, Telefax (312) 253-0088

THE ALUMINUM ASSOCIATION (AA)
900 19th Street Northwest, Washington DC 20006
Phone (202) 862-5100, Telefax (202) 862-5164

P.O. Box 753, Waldorf, MD 20601 Phone (202) 862-5100

AMERICAN ARCHITECTURAL MANUFACTURERS ASSOCIATION (AAMA) 2700 River Road, Des Plains, IL 60018 Phone (312) 699-7310

AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO)
444 North Capital Northwest, Suite 225, Washington DC 20001

AMERICAN ASSOCIATION OF TEXTILE CHEMISTS AND COLORISTS (AATCC) P.O. Box 12215, Research Triangle Park, NC 27709 Phone (919) 549-8141, Telefax (919) 549-8933

AMERICAN BOILER MANUFACTURERS ASSOCIATION (ABMA) 950 N. Glebe Road, Suite 160, Arlington, VA 22203 Phone (703) 522-7350

AMERICAN CONCRETE INSTITUTE (ACI)
P.O. Box 19150, Detroit, MI 48219-0150
Phone (313) 532-2600, Telefax (313) 538-0655

Phone (202) 624-5800, Telefax (202) 624-5806

AMERICAN CONCRETE PIPE ASSOCIATION (ACPA) 8320 Old Courthouse Road, Vienna, VA 22180 Phone (703) 821-1990

AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS (ACGIH) 650 Glenway Avenue, Building D-7, Cincinnati, OH 45211 Phone (513) 661-7881

AMERICAN GAS ASSOCIATION (AGA)

1515 Wilson Boulevard, Arlington, VA 22209 Phone (202) 841-8400

AMERICAN GAS ASSOCIATION LABORATORIES (AGAL)

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APPENDIES N

SPKSPECS MANUAL



The Automated Specification

Criteria Bulletin Board System

SPKSPECS MANUAL

Sacramento District
U.S.ARMY Corps of Engineers
ENGINEERING DIVISION
Technical Support Branch
ARMSTCX/CMU

APRIL 1991

SPKSPECS INSTRUCTION MANUAL

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APPENDIX A

1.1 INTRODUCTION

1.1 What is SPKSPECS?

SPKSPECS is a Criteria Bulletin Board System created by the Sacramento District U.S. Army Corps of Engineers. It is designed to permit organizations access to U.S. Army Corps of Engineers, Air Force, and Navy criteria, and to send messages to the Sacramento District easily and quickly via an electronic medium. The Bulletin Board System is operating on a UNISYS 5000/80 computer located in Sacramento, California.

1.2 What is Available?

The types of information accessible include Corps of Engineers Military Guide specifications (CEGS), Civil Works Specifications, Reserve Center Specifications, District Guides and Notes, Technical Letters and Memorandum, and other manuals and publications. The data contained in the bulletin board is continuously updated.

1.3 Hardware and Software Requirements

To use SPKSPECS you need a 1200, 2400, 4800 or 9600 baud modem and a communications program. It is recommended that you use a modem with at least a baud rate of 2400 and a computer with a hard disk drive due to the large size of some of the data to be downloaded.

To operate at 9600 baud your modem must be MNP Class 6. (The model we are currently using is MICROCOM 9624C). If you are using a 2400 baud modem, MNP Class 5 (Hayes compatible), performing a "compress" procedure (consult your owner's manual) will allow you to increase the baud rate to 4800. To transfer at 9600 baud you must call (800) 445-8644.

SPKSPECS supports Xmodem, Ymodem, YmodemBatch, Kermit and Ascii protocols for file transfers. Be sure to verify that your communications program can use these protocols and is compatible with a vt100 (or vt102) terminal.

1.4 Product Support

Sacramento District currently uses the communications program PROCOMM Version 2.4.2 and is licensed to distribute the program to users of the bulletin board. You may request a copy free of charge by contacting the system operators at (916) 551-2333.

1.5 File Format

All files on the bulletin board are standard text files (Ascii) and cannot support graphics at this time. ASCII files do not conform to any special word processing program. Usually, ASCII text can be easily converted (imported) to use with most word processing systems.

1.6 Using Word Processors

Most word processors have the capability to read ASCII files. Consult your word processing manual for instructions on how to retrieve and convert ASCII files. Because word processing programs are not completely compatible to ASCII files you may need to do some reformatting. This includes setting the font, margins and tabs. You will need to make some corrections because of "hard" returns, tabs, and other types of control characters used by your word processing system.

2. GETTING STARTED

Access to the SPKSPECS bulletin board can be requested by calling (916) 551-2333. The SPKSPECS system operators, who are responsible for the day-to-day operations of the bulletin board, will provide you with a user name. An optional password can also be assigned if requested. The operators are available between the hours of 7:00 am and 3:30 pm (Pacific Time) to answer any questions you may have concerning the bulletin board. The hotline is also available 24 hours a day for you to leave a recorded message. The system operators will return your call as promptly as possible.

2.1 Connecting to SPKSPECS

Access the SPKSPECS Bulletin Board by calling one of the two dial-in lines available on a 24 hour basis:

(800) 445-8643 and (916) 321-9040

(if using 9600 baud call: (800) 445-8644; refer to paragraph 1.3)

The toll free number is accessible throughout the contiguous United States, Alaska, Hawaii and Puerto Rico.

Your communications program must be set for the following parameters:

8 bits .. No parity .. 1 stop bit .. vtl00 emulation (or vtl02 superset)

2.2 Logging into SPKSPECS

If you are properly connected to the computer the following message should appear on your computer monitor:

spked
ARMS Project(spked)
2400 login:

Type in the following in lower case letters:

spkspecs

(and depress <Enter>).

Enter the users name (pseudonym you received from the system operator) at the prompt:

Example: day

If you did not request a password you will immediately access the bulletin board, if you were assigned a password you will be prompted to enter it at this time:

Example: brite

(and depress <Enter>).

The letters of your password will appear on the screen as X's; safeguarding it to anyone who may be observing.

If you enter a typographical error during login the computer will reject access and prompt you for your login again. Repeated improper attempts will cause the computer to disconnect you from the system.

Once you have connected and logged into the system, a message will appear on the screen as follows:

If you have any questions please contact the Criteria Management Unit at (916) 551-2333

Type an s at the command prompt.

The above message will periodically be updated with notices of changes that have occurred on the bulletin board.

After the prompt:

Command (?=Help):_

enter an s (then depress the <Enter> key).

The various branches (directories) you may access will be displayed on your monitor screen.

Example:

At the Branch: prompt, enter the name of the branch you wish to access and depress the <Enter> key.

A list of divisions will appear on your screen. Choose the division you want by typing in the name at the prompt **Division**:.

Examples:

div01		INDEX
div02		GENERAL
div03	or	AIR-FORCE
div04		ARMY
div05		ETL

The next prompt pertains to the actual files within this division:

Download, List, Exit:

Depressing the e (EXIT) key at any time will return you to the previous step. Repeat this step to log out of the system. With the exception of e (EXIT) these choices are only appropriate when there are files available to download or list. A branch or division may not be downloaded, only FILES may be downloaded.

Example:

- 1. Enter the INDEX at the Branch: prompt.
- 2. Enter SPECS at the Division: prompt.

The screen will display the prompt:

INDEX/SPECS Branch
Download, List of Files, Exit:

In the above example, SPECS is a division within the branch, INDEX (not a file).

Type in the letter 1 followed by the <Enter> key. A list of the available files in this branch/division will be displayed: followed by the prompt to download, list, or exit as shown below:

CEAGS	1983	26-FEB-91
CEGS	24655	05-MAR-91
CIA	6788	15-0CT-90
MILSPEC	309	02-AUG-90
SPK	3636	21-FEB-91

INDEX/SPECS Branch
Download, List of Files, Exit:

To view the CEGS INDEX, depress d for download (followed by the <Enter> key.

You will then be requested to:

Enter file to download:

Type in CEGS (and depress the <Enter> key). The following will appear on your monitor:

Supported transfer protocols are: View, Ascii, Xmodem, Ymodem Batch, and Kermit. Enter File Transfer Protocol (Xmodem default):

Depress v (to view) and <Enter>. The CEGS index will appear on the screen. When viewing a document, a Menu Bar is displayed at the bottom of the screen showing instructions for scrolling and quitting. Use the space bar to scroll down through the document or the b key to scroll back up through the document. The HELP command will give you other instructional information such as how to search. Access the help screen by typing a capital H. When you are finished viewing the document, depress q to quit and return to the previous menu.

3. USING SPKSPECS

3.1 Organization of Files

Under Logging into SPKSPECS you became briefly acquainted with the files on the bulletin board. See Appendix A for a listing of what is available.

3.2 Finding Criteria

Be sure to view the latest index, it is an invaluable aid in locating files on the bulletin board.

If you have difficulty locating a guide specification or other criteria, please contact your Corps of Engineers Project Manager.

3.3 Entering Commands

After typing an s at the Command (?=help):_ prompt you will see the initial Library listing on your screen:

AE GUIDE AIR-FORCE ARCHIVES ARMY BASE-AF CEAGS CEGS CIV CMD-AF GENERAL HTW INDEX MILSPEC SPECTACT SPK SPKNOTES

Branch:

To access the CEGS section type in:

CEGS (and <Enter>)

The list of divisions will (div01...div16) appear on your monitor screen. To select a specification from div05 type in:

div05 (and <Enter>)

The message below will appear on your screen:

Download, List of Files, Exit:

Type in the letter 1 and <Enter>.

A list of the files in div05 will be displayed on your screen. The prompt to download, list or exit will appear again.

To examine the file 05300 type in d and <Enter>.

The next message prompts you to:

Enter File to Download:

Type in 05300 and <Enter>. The following prompt appears:

Supported transfer protocols are: View, Ascii, Xmodem, Ymodem, Ymodem Batch, and Kermit. Enter file Transfer Protocol (Xmodem default):

To view 05300, type in v. The file text will appear on your monitor.

A Menu Bar appearing across the bottom of the screen informs the user to depress the Space Bar to scroll down, the letter ${\bf b}$ to scroll up, a capital ${\bf H}$ for the help screen, or ${\bf q}$ to quit.

After entering q the div05 list of files will reappear. Each time an e is entered you will go back a step. To select another area of the bulletin board, continue pressing e until you reach the division or branch listings then simply repeat the steps as demonstrated in the example above.

3.4 Exiting the Bulletin Board

and the second s

To exit the bulletin board press e until you see the prompt:

Command (?=help):_

Type in e and <Enter>. Answer Y to the prompt (if you decide not to exit at this time depress the <Enter> key to select the default N):

Are you sure you want to log out (N)?:

The following message will appear:

Goodbye, DAY. Call again soon!

To exit the PROCOMM system entirely, depress ALT/X. A window message will appear:

EXIT TO DOS? (Y/N)

Answer the prompt by entering Y for yes or N for no.

3.5 Breaking Communications

Should a "lock-up" occur (the computer appears to be doing nothing and input is inhibited) try depressing the <Enter> key several times. If you still get no response you can "Break" communications. If you are running Procomm on an IBM-PC or compatible, use ALT/F7 (the ALT and F7 keys depressed simultaneously). It may be necessary to press ALT/F7 two or three times. Consult your owner's manual for your communications program and/or hardware. If the "Breaks" do not respond, you may break the connection by pressing ALT/H once to hang up. If you have any questions please free to call the HOT LINE: (916) 551-2333.

3.6 Time Limits

SPKSPECS has a time limit feature. You to be automatically logged out if no activity occurs on the system for 30 minutes. A five-minute warning will be given prior to automatic log-off. If ignored, the system will disconnect.

3.6 Downloading Data to Disk

You may wish to transfer information to your own media in order to edit and/or print the data. The following is the method by which you may download the data onto your own disk.

(Helpful hint: Since you have only 15 seconds to prepare for downloading, write down your filename exactly as it appears on the screen and have a formatted disk in place).

Example:

To download EM (Engineering Manual) 1110-3-160 from the ARMY section to your diskette or hard disk:

Dial into SPKSPECS, enter your users name (and password if applicable). Enter s at the Command (?=help): prompt. At the Branch: prompt, enter ARMY, then enter EM at the Division: prompt. Select the letter 1 to list the files in this directory. Use the space bar to scroll down through the listing to find the file you wish to download, in this example, the file "3.160" is found after scrolling down to the third frame. Enter the download command d.

Enter the file name exactly as it appeared in the listing. If you wish to view the file prior to downloading, enter the view command v.

If you chose to view the document enter the quit command q to return to the option prompt Download, List of Files, Exit: Enter the download command d again.

At the prompt Enter file to download:, type in the file name exactly as it appeared on the listing, followed by <Enter>. You will then be prompted to enter the transfer protocol. In this example we will use XMODEM. You will notice that XMODEM is the default, therefore, simply depress the <Enter> key. (If your system is supporting one of the other listed protocols such as Kermit, type in the protocol name and <Enter>.

Next, depress the Page Down (<PgDn>) key. A window will appear with a list of numbered protocols. Since we chose XMODEM (choice number one) enter the number 1. Another window will appear in the center of the screen prompting you to Please enter filename:. Enter the destination disk drive followed by a colon, (i.e., a:, b:, c:) and the name you wish

to give your downloaded file. You may give it the same name as it appears on the bulletin board and add an extension such as .ASC to show the file is in ASCII format. Your entry would look something like this:

a:3.160.asc

Another window will appear revealing the name of the file and the size of the file in bytes and blocks. The file will commence to download from the bulletin board to a formatted disk in the specified drive. When the file has been downloaded, a series of tones will sound to inform you that the operation is completed. If (under the heading entitled LAST MESSAGE:) an error is indicated, it is advisable to try downloading the file over again. When the download is aborted, erase the aborted file from your disk and download again. You can now retrieve the file from your diskette (or hard disc) and convert it from the ASCII form to your wordprocessing program.

3.8 Using Wild Cards to Download Batch Files

It is possible to download several or all of the files within a division by using wild card characters. Your communications program must support Ymodem Batch protocol in order to utilize this option. Wild card characters can only be used to download files with a numeric filename. Filenames containing alphabetic characters must be downloaded one at a time.

An asterisk (*) will match any string of numbers. For example, when prompted for the filename to be downloaded enter "123*", all files that begin with the numerals "123" will be downloaded. If you wish to select all files that have a "9" anywhere in the filename, enter "*9*". An asterisk (*) will match any pattern of any length. If "*123" is entered, all files ending with the numerals "123", including a file named "123", (if it exists) will be downloaded.

The "?" wild card character is similar to the "*", but it is used to match any SINGLE numeral. As an example, if you wish to download all files that are five characters long beginning with "1234", enter "1234?". This will match filenames such as "12340" and "12345" but will not match filenames "1234" or "123456".

Brackets may be used to indicate a set or range of numerals. Entering "1234[036]" will cause files identified by "12340", "12343" and "12346" to be downloaded. If "1234[1-39]" is entered, only files "12341", "12342", "12343" and "12349" will be downloaded.

Wild cards can be used together for even more selective downloads. For example, if you enter "*[3-8]?", all files containing one of the numerals from 3 through 8 as the second to last character in the filename will be downloaded.

4. USING THE MAIL FEATURE

4.1 Sending Messages to the System Operators

You may use the mail command to send suggestions or comments concerning the bulletin board to the SPKSPECS system operators.

At the prompt:

Command(? = Help):

enter the mail command, m, and depress <Enter>. You will be prompted to enter the subject heading, enter the subject of the message (it is not necessary to type in the word "SUBJECT"). Specify whether or not you want the message to be private or depress the <Enter> key to use the default No. Only the owner of a message and the system operator has access to a private message.

You can now begin entering text. You may use the Backspace key to correct errors. When you get near the end of a line depress <Enter> and continue with your message on the next line. A message line will accommodate only 78 characters.

When you've completed your message use the <Enter> key to bring the cursor down to the next blank line and Enter a forward slash (/). For a short description of all the editor commands enter a "?" at the prompt:

Edit command (L,C,E,S,A or ? for Help): ?

The help listing will appear on the screen as shown below:

Editor commands:

L - List message

C - Continue message entry

E - Edit message

S - Save message

A - Abort message

The list command (the letter 1) will show your message on the screen. Enter the continue command, c, to add lines to your message, or the edit command, e, to edit the lines in your message.

The edit command will allow you to edit each line of your message by entering the number of the line you wish to replace. The original line of text will be displayed. Retype the line exactly as you now wish it to appear, then depress the <Enter> key. The new text you entered will replace the previous line. If you decide not to replace the line simply depress the <Enter> key prior to retyping the line.

Enter the save command s to save and send the message. Using the abort command a will abort the message entirely.

4.1.2 Reading Messages

To read public messages sent by other users enter the read command r at the prompt:

Command (?=Help):_

To choose the message you wish to read, enter the appropriate response (f, r, or i) to the prompt:

(F)orward, (R)everse, (I)ndividual:_

Enter the forward command, f, to access messages and enter the number of the message you wish to read. The default will be message number one (1). You can enter the beginning and ending numbers of messages you wish to read by responding to the appropriate prompts:

Enter beginning message (1):

Enter ending message (40):

The default of the ending message is the number of the last message received. After each message, you will be given the option to continue reading or to stop.

If you wish to read the messages in reverse order (latest message first), use the reverse command, r, option. To access an individual message, enter the individual command, i, and the message number you wish to read.

4.1.3 Listing Messages

To display the message listing, enter a q at the Command (? = Help):_prompt. Answer the next prompt:

(F)orward, (R)everse, (I)ndividual:

with f or r. A listing of the messages will appear on the screen. A typical entry looks like this:

16 MTS 10-MAR-91 Using mail

This entry tells you that the sixteenth message was sent by MTS on March 10, 1991 and the subject is **Using mail**. Missing message numbers are due to deleted messages and/or private messages sent by other users.

4.1.4 Deleting Messages

To delete a message that you have sent, enter k (KILL) at the Command (? = Help): prompt. You will be asked which message you wish to delete:

Enter message number to kill:

(You can only delete messages that YOU have sent).

APPENDIX A

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AIR-FORCE Documents:
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AF Regulations AE Guide Air Force Vol 1 Army Vol 1 Vol 2A - Cost Estimating (A) Manual Vol 2B - Cost Estimating (B) Manual Vol 3 - A/E Guide Specifications Vol 4 - 0 & M AF Construction Technical Letters AF Engineering Technical Letters AF Manuals AF Occupational Safety and Health Standards AF Regulations General Information Waivers to AFR 88-15

ARCHIVES - Previous Corps of Engineers guide specifications that have been updated or superseded within the last quarter.

Divisions 01 through 16

ARMY Documents:

Division Technical Letters Engineering Manuals Engineering Technical Letters Engineering Regulations Technical Notes

BASE-AF - Specific Design Criteria pertaining to the following Air-Force Bases:

Beale
DM (Davis-Monthan)
Edwards
George
Hill
Luke
March
Mather
McClellan

Nellis Norton Vandenberg Williams

CEAGS - U.S. Army Corps of Engineers Abriged Guide Specifications

Divisions 01 through 16

CEGS - U.S. Army Corps of Engineers Specifications

Divisions 01 through 16

CIV - Civil Works Guide Specifications

Divisions 01 through 16

CMD-AF - Headings available:

AFCC

AFESC

AFLC

AFRCEWR

AFSC

ATC

BMS

HQ-AF

uų-

MAC

SPACE

TAC

GENERAL:

DISTRICT

MANUAL

SAFETY

PUBS

HTW - Hazardous & Toxic Waste Criteria

AIR-FORCE

ARMY

INDEX - Provides a brief Description of the entire contents of the bulletin board:

PUBS:

AIR-FORCE

ARMY-DTL ARMY-EM ARMY-ETL ARMY-TN DISTRICT GENERAL HTW SAFETY

SPECS:

CEAGS CEGS CIV MILSPEC SPK

MILSPEC

Division 01

SPECTACT - Specifications for use with SPECSINTACT program

Divisions 01 through 16

SPK - Sacramento District Specifications

Divisions 01 through 16

SPKNOTES - Sacramento District Instructions pertaining to CEGS

Divisions 01 through 16

APPENDIEZ O

INDEX OF GUIDE SPECIFICATIONS FOR MILITARY CONSTRUCTION

ARCHITECTURAL—ENGINEER REQUEST FORM



INDEX OF GUIDE SPECIFICATIONS FOR MILITARY CONSTRUCTION

[SACRAMENTO DISTRICT (SPK) REQUEST FOR GUIDE SPECIFICATIONS]

Project Information

Firm Name		•	
Attention			
Street	City	State	Zipcode
Project Title			
Project Location	<u> </u>		
Sacramento District Corp of	Engineers	Project Mar	nager
Air Force Army	Inst. Supt	• Spec	. Proj.:
* OFFICE USE ONLY * Received Mailed Initials			-

THE MOST CURRENT GUIDE SPECIFICATIONS ARE AVAILABLE ON THE ELECTRONIC BULLETIN BOARD. THE INDEX IS UPDATED WEEKLY; CHECK THE BOARD FOR THE MOST UP-TO-DATE GUIDE SPECIFICATIONS. THE FOLLOWING LISTING IS PROVIDED AS GUIDANCE ONLY WHEN REQUESTING HARD COPIES.

DIVISION 1 - GENERAL REQUIREMENTS

CSI NUM	BER TITLE	DATE	COPY
01000	GENERAL NOTES	09/90	
01010	CEGS ORGANIZATION GUIDANCE	11/88	61813 31813
01020	CEGS TEMPLATE	01/90	2:15:32 3:32:33

Architectural Engineer Guide Volume III Specifications Dec 1990

CSI NUMBE	ER TITLE	DATE	COPY
01090	SOURCES FOR REFERENCE PUBLICATIONS	09/90	114:13 114:13
01300	SUBMITTALS	11/88	1-34-9 1-34-9 1-34-9
01305	SUBMITTAL PROCEDURES	12/89	
SACRA	MENTO DISTRICT PREPARED (Copies not ava	ailable to A	-E's)
01400	CONSTRUCTION QUALITY CONTROL		
01430	ENVIRONMENT PROTECTION		
01450	DESCRIPTION OF ADDITIVE\DEDUCTIVE BID	ITEM(S)	
01500	GENERAL REQUIREMENTS		
	DIVISION 2 - SITE WORK		
		,	
02080	ASBESTOS; ABATEMENT AND DISPOSAL	03/89	
02081	ASBESTOS; MAINTENANCE AND REPAIR	11/88	1: 18:11 1: 18:12
02082	ASBESTOS; BUILDING AND DEMOLITION	03/89	11811 11813
02083	ASBESTOS; ABATEMENT MONITORING	03/89	4158.45 4184.45
02110	CLEARING AND GRUBBING	07/89	11512 11513
02158	SLABJACKING RIGID PAVEMENTS	04/90	1000 (10 1000 (10
02201	EXCAVATION, FILLING AND BACKFILLING FOR BUILDINGS	11/87	11813 11813 11813
02210	GRADING	12/88	
02210.1	EARTHWORK (SPK DISTRICT GUIDE)	04/89	1: W 13: 1: W 13:
02222	EXCAVATION, TRENCHING AND BACKFILLING FOR UTILITIES SYSTEMS	07/89	
02225	EARTHWORK FOR ROADWAYS, RAILROADS, AND AIRFIELDS	07/89	118101 118101

Architectural Engineer Guide Volume III Specifications Dec 1990

CSI NUMBI	ER TITLE	DATE	COPY
02232	SELECT-MATERIAL SUBBASE COURSE	03/89	1;4;4; 1;4;4;
02233	GRADED-CRUSHED-AGGREGATE BASE COURSE	03/89	80 (8 1) 81 (8 1)
02234	SUBBASE COURSE	03/89	10 (8 c); 11 (8 c); 11 (8 c);
02238	BITUMINOUS-STABILIZED BASE COURSE, SUBBASE OR SUBGRADE	02/89	11 M (2) 11 M (2)
02239	PORTLAND CEMENT-STABILIZED BASE OR SUBBASE COURSE	02/89	1106-01 1106-01 1106-01
02240	LIME-STABILIZED BASE COURSE, SUBBASE, OR SUBGRADE	02/89	1000 1000 1000 1000
02241	AGGREGATE BASE COURSE	02/89	
02242	BITUMINOUS BASE COURSE	03/89	1:15:00 1:15:13:
02270	DUST AND EROSION CONTROL SEEDING (SPK DISTRICT GUIDE)	04/89	12818 11818
02360	STEEL H-PILES	01/89	10 H (1) 11 H (1)
02361	ROUND TIMBER PILES	07/89	11 M 44 11 M 12 11 M 13
02362	PRESTRESSED CONCRETE PILING	02/89	
02363	CAST-IN-PLACE CONCRETE PILES, STEEL CASING	02/89	10810 10818
02365	PILING: COMPOSITE, WOOD AND CAST-IN-PLACE CONCRETE	07/89	11813 11813
02366	PRECAST CONCRETE PILING	07/89	
02371	AUGER PLACED GROUT PILES	07/89	2155 to 2156 to
02383	DRILLED FOUNDATION CAISSONS (PIERS)	04/89	21 (20 c) 21 (20 c) 21 (20 c)
02442	LAWN SPRINKLER SYSTEM (SPK DISTRICT GUIDE)	04/89	

CSI NUMB	ER TITLE	DATE	COPY
02450	RAILROADS	12/89	1000 1000 1000
02452	STREET NAME SIGNS, TRAFFIC SIGNS, AND RESERVED (HANDICAPPED) PARKING (SPK GUIDE DISTRICT GUIDE)	04/89	
02490	TREES, SHRUBS, GROUND COVERS AND VINES	04/89	
02494	ICE PLANT SPRIGGING (SPK DISTRICT GUIDE)	04/89	138 th 128 th
02511	CONCRETE SIDEWALKS AND CURBS AND GUTTERS	01/89	2008 to 2488 531
02513	BITUMINOUS COURSE (CENTRAL-PLANT HOT MIX (SPK DISTRICT GUIDE)	04/89	19857 2313
02515	CONCRETE PAVEMENT FOR ROADS AND AIRFIELDS	11/88	1985 (2) 1985 (2)
02518	CONCRETE BLOCK PAVEMENTS	05/90	1178 121 1178 121
02520	ROLLER COMPACTED CONCRETE (RCC) PAVEMENT FOR AIRFIELDS, ROADS, STREETS, AND PARKING LOTS	01/88	
02530	PLAYING SURFACES FOR OUTDOOR SPORTS FACILITIES	04/89	1:3:0 1:3:0
02546	AGGREGATE SURFACE COARSE	04/89	11 (12 (12 (12 (12 (12 (12 (12 (12 (12 (
02551	BITUM. INTERM. & WORKING COURSES FOR ROADS, STREETS & OPEN STORAGE (CENTRAL-PLANT HOT-MIX)	04/89	2312 2312 2312
02552	BITUMINOUS BINDER AND WEARING COURSE (CENTRAL-PLANT COLD-MIX)	02/89	11813 11813
02554	BITUMINOUS ROAD-MIX SURFACE COURSE	03/89	16860 18872
02555	BITUMINOUS SURFACE TREATMENT	04/89	0:43:05 0:30:03

CSI NUMBI	CR TITLE	DATE	COPY
02556	BITUMINOUS & WEARING COURSES FOR AIRFIELDS, HELIPORTS & HEAVY-DUTY PAVEMENTS (CPHM)	09/84	
02557	TAR & RUBBERIZED-TAR CONCRETE PAVEMENTS	03/89	20 de 10 de
02558	BITUMINOUS TACK COAT	01/89	10815 11815
02559	BITUMINOUS PRIME COAT	01/89	9030 to 9432 5
02560	BITUMINOUS SEAL COAT, SPRAY APPLICATION	12/88	11818 11818
02560.1	BITUMINOUS PRIME COAT (SPK DISTRICT GUIDE)	04/89	1784 1784 1784
02561	ASPHALT SLURRY SEAL	04/89	1480k 1881
02562	POROUS FRICTION COURSE FOR AIRFIELDS AND ROADS	09/84	: 120 : 120 : 120 : 120
02563	RECYCLED ASPHALT CONCRETE INTERMEDIATE AND WEARING COURSES	12/88	1:348 1:349
02564	COLD MIX RECYCLING	03/89	110513 110513
02577	PAVEMENT MARKINGS (AIRFIELDS AND ROADS)	05/87	17858 17878
02579	PATCHING OF RIGID PAVEMENTS	02/89	
02580	JOINT SEALING IN CONCRETE PAVEMENTS FOR ROADS AND AIRFIELDS	09/82	1.500 1.500 1.500
02581	RESEALING OF JOINTS IN CONCRETE PAVEMENTS FOR ROADS AND AIRFIELDS	05/84	0800 5240
02590	GROOVING FOR AIRFIELD PAVEMENTS	04/90	11910
02593	PREFORMED ELASTOMETRIC JOINT SEALS FOR CONCRETE PAVEMENTS	10/89	1:2:3 1:2:3

CSI NUMBE	R TITLE	DATE	COPY
02596	HEATER-PLANING OF BITUMINOUS PAVEMENT	04/89	165 de 165 de
02597	HEATER SCARIFYING OF BITUMINOUS PAVEMENTS	04/89	1:31:15 1:32:13
02598	COLD MILLING OF BITUMINOUS PAVEMENTS	04/89	70160 ts 1718 (3
02599	BITUMINOUS REJUVENATION	04/89	\$4 15 0 Bz \$1 15 0 Bz \$1 15 0 Bz
02611	CONCRETE PAVEMENT FOR ROADS AND (SPK DISTRICT GUIDE)	12/88	100 de 100 de 100 de
02660	WATER LINES	04/89	1051 h 1051 h
02666	UNDERGROUND DISTRIBUTION SYSTEMS [LOW TEMP] [CHILLED WATER] [&] [HOT WATER] [DUAL TEMP]	02/89	1155-18 1155-15
02670	WATER WELLS	02/88	
02685	GAS DISTRIBUTION SYSTEM	02/90	118113 11813
02695	UNDERGROUND HEAT DISTRIBUTION SYSTEMS (PREAPPROVED SYSTEMS)	03/89	0.000,00 0.000,00
02696	HEAT DISTRIBUTION SYSTEMS IN CONCRETE TRENCHES	07/90	2000 to 2000 to
02697	ABOVEGROUND HEAT DISTRIBUTION SYSTEMS	03/89	11 (12 to 12
02710	SUBDRAINAGE SYSTEM	02/89	10313 11313
02711	FOUNDATION DRAINAGE SYSTEM	04/89	113115
02720	STORM-DRAINAGE SYSTEM	01/89	95555 93553
02730	SANITARY SEWERS	01/89	2000 2000 2000
02732	FORCE MAINS AND INVERTED SIPHONS; SEWER	06/89	1125.00 1127.00 1127.00
02751	PNEUMATIC SEWAGE EJECTORS	11/89	

CSI NUMBI	ER TITLE	DATE	COPY
02752	SIPHONS, DOSING	01/89	
02831	FENCE, CHAIN LINK	01/89	1-18-14 216110 216101
02835	VEHICLE BARRIERS	04/89	
02935	TURF	11/88	11 (4 c) 11 (4 c) 11 (4 c)
02950	TREES, SHRUBS, GROUND COVERS, AND VINES	06/90	2 - 12 - 12 2 - 12 - 12 2 - 12 - 13
02955	CROWNVETCH	07/90	10 M 10 20 M 10 20 M 10
	<u>DIVISION 3 - CONCRETE</u>		
03100	STRUCTURAL CONCRETE FORMWORK	11/88	1,755 de 2,755 de 2,755 de
03200	CONCRETE REINFORCEMENT	11/88	10 (E 1) 17 (E 1)
03250	EXPANSION JOINTS, CONTRACTION JOINTS, AND WATER STOPS	12/88	17 (24 (2 27 (24)
03300	CONCRETE FOR BUILDING CONSTRUCTION	12/88	0.050) 0.050) 0.050
03302	CONCRETE (SPK DISTRICT GUIDE)	04/89	1:15:15 1:15:15 1:15:15
03330	CAST-IN-PLACE ARCHITECTURAL CONCRETE	03/89	9:43:4 8:33:5
03362	SHOTCRETE (SPK DISTRICT GUIDE)	04/89	5455 5455
03414	PRECAST ROOF DECKING	03/89	10 H (1) 10 H (1)
03420	PRETENSIONED PRESTRESSED CONCRETE (SPK DISTRICT GUIDE)	04/89	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
03450	PRECAST ARCHITECTURAL CONCRETE	11/88	11800 11811 11811
03510	ROOF DECKING CAST-IN-PLACE LIGHTWEIGHT CONCRETE	01/89	178-17 1781-18
03550	PRECAST CONCRETE FLOOR AND ROOF	03/89	

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CSI NUME	BER TITLE	DATE	COPY
	DIVICION A MACONDY		
	<u>DIVISION 4 - MASONRY</u>		
04200	MASONRY	03/89	
	DIVISION 5 - METALS		
05055	WELDING, STRUCTURAL	11/88	1078 (3) 0408 (3) 0408 (3)
05061	ULTRASONIC INSPECTION OF WELDMENTS	01/89	
05062	ULTRASONIC INSPECTION OF PLATES	12/88	1:8:3 3:3:3
05120	STRUCTURAL STEEL	04/89	018-01 018-01 018-03 018-03
05210	STEEL JOISTS	11/88	138 A 138 B
05300	STEEL ROOF DECK	10/89	9:55:0 3:35:3
05330	COMPOSITE FLOOR TILE (SPK DISTRICT GUIDE)	04/89	1:8:5 1:8:5
05400	COLD-FORMED FRAMING (SPK DISTRICT GUIDE)	04/89	11816 11818
05500	MISCELLANEOUS METAL .	01/89	108 (b 108 (c)
	DIVISION 6 - WOOD AND PLASTIC	<u>s</u>	
06100	ROUGH CARPENTRY	02/89	0.300 0.300 0.300
06200	FINISH CARPENTRY	02/89	108 18 108 18
06410	CASEWORK (SPK DISTRICT GUIDE)	12/88	
	DIVISION 7 - THERMAL AND MOISTURE PRO	OTECTION	
07111	ELASTOMERIC MEMBRANE WATERPROOFING	05/90	10010
07112	BITUMINOUS WATERPROOFING	12/88	
07140	METALLIC OXIDE WATERPROOFING	03/89	1911
07160	BITUMINOUS DAMPPROOFING	12/88	13818

CSI NUMBI	ER TITLE	DATE	COPY
07220	DOOD THOU AMEDI	11/88	5-8-6-
07220	ROOF INSULATION	•	
07240	EXTERIOR INSULATION AND FINISH SYSTEM	12/88	17 E 18 17 E 18 17 E 18
07250	SPRAY-APPLIED FIREPROOFING	05/90	
07270	FIRESTOPPING	12/89	20 M (2) 20 M (2)
07311	ROOFING, STRIP SHINGLES	02/89	958 (8 518 (8
07413	METAL ROOFING AND SIDING, PLAIN	03/89	
07415	METAL ROOFING AND SIDING, FACTORY-COLOR-FINISHED	07/89	1997
07416	STANDING SEAM METAL ROOFING SYSTEM [AND FASCIAS) (SPANNING) (SPK DISTRICT GUIDE)	01/90	12816 5.816
07510	BUILT-UP ROOFING	11/88	1:18:15 2:18:15
07530	ELASTOMERIC ROOFING (EPDM)	11/88	
07540	ELASTOMERIC ROOFING, FLUID APPLIED	12/88	20 % 12 20 % 12
07550	PROTECTED MEMBRANE ROOFING	12/88	0:00:00 0:00:00
07555	POLYVINYL CHLORIDE (PVC) ROOFING	01/89	17 H
07600	SHEET METALWORK, GENERAL	01/89	1:510 1:410
07610	BUILT-UP ROOFING (SPK DISTRICT GUIDE)	01/87	
07720	ROOF VENTILATORS, GRAVITY TYPE	12/88	20 55 55 20 55 55 20 55 55
07920	CAULKING AND SEALANTS	03/89	60 H 0 TO 60 H 1 F
	DIVISION 8 - DOORS AND WINDOWS		
08110	STEEL DOORS AND FRAMES	02/89	10 3 00 20803
08120	ALUMINUM DOORS, FRAMES AND STOREFRONTS	05/89	11819 11819
08201	WOOD DOORS	03/89	1:35:35 1:35:35

CSI NUMBE	ER TITLE	DATE	COPY
08312	SLIDING METAL DOORS	03/89	9353 3353
08316	DOOR; VAULT, SECURITY (SPK DISTRICT GUIDE)	03/89	1989 1989 1989
08318	SECURITY VAULT DOOR	03/89	2005 (2) 2008 (3)
08325	COLD STORAGE DOORS AND FRAMES	03/89	
08330	OVERHEAD COILING DOORS	03/89	161862 6 161862
08331	METAL COILING COUNTER DOORS	04/89	20 (5 to 2) 20 (5 to 2) 20 (5 to 2)
08353	ACCORDION DOORS AND PARTITIONS AND OPERABLE PARTITION ROOF VENTILATORS, GRAVITY-TYPE	03/89	1991 1981 1
08360	SECTIONAL OVERHEAD DOORS	02/89	11 E 12 E
08365	VERTICAL LIFT DOORS	04/89	1:35 to 1:35 to
08371	ALUMINUM SLIDING GLASS DOORS	03/88	10% (\$) 31% 73
08420	INSULATED WALL PANELS (SPK DISTRICT GUIDE)	04/89	
08510	STEEL WINDOWS	12/88	
08520	ALUMINUM WINDOWS	11/88	01 (5 m) 11 (5 m) 11 (5 m)
08521	ALUMINUM ENVIRONMENTAL CONTROL WINDOWS	04/89	
08610	WOOD WINDOWS	12/89	10.45 Pt 11.45 Pt
08615	CLAD WOOD WINDOWS	03/89	11 H 12 T
08620	PLASTIC WINDOWS	01/89	1: 12 · 12 1: 12 · 13 1: 12 · 13
08700	HARDWARE; BUILDER'S (GENERAL PURPOSE)	02/86	91 (87 P) 91 (87 P) 91 (87 P)
08701	HARDWARE; PRISON-LOCKING DEVICES	04/89	
08810	GLASS AND GLAZING	12/88	

CSI NUMB	ER TITLE	DATE	COPY
08840	PLASTIC GLAZING	04/89	10800 10800
	<u>DIVISION 9 - FINISHES</u>		
09200	LATHING AND PLASTERING	11/88	21 % 0 h 21 % 1 h
09215	VENEER PLASTER	03/89	2:33:03 3:33:33
09225	STUCCO	01/89	7:15:00 1:15:00 1:15:00
09250	GYPSUM WALLBOARD	11/88	1: 12 (1) 1: 12 (1)
09310	CERAMIC TILE	04/89	20% (3) 21% (3)
09411	BONDED TERRAZZO	02/89	10 % 10
09431	CONDUCTIVE RESINOUS TERRAZZO FLOORING	04/89	10 16 0 00 21 16 7 00
09433	CONDUCTIVE SPARKPROOF INDUSTRIAL RESINOUS	01/89	17810 17810 17810
09445	RESINOUS TERRAZZO FLOORING	03/89	25 M 10 25 M 15 25 M 15
09510	ACOUSTICAL CEILINGS	01/89	1: W : 0: 2: 4: 0:
09560	WOOD STRIP FLOORING	04/89	1: 15: 15: 2: 15: 13:
09570	HARDWOOD PARQUET FLOORING	01/89	11 (18 0 to 11 (18 0 to
09650	RESILIENT FLOORING	11/88	0:15:15 0:15:15
09655	RESILIENT ATHLETIC FLOORING	08/89	20 5 20 24 3 43
09675	CONDUCTIVE VINYL FLOORING	12/88	10 M 61 14 M 14
09680	CARPET	03/89	11/5 17 11/5 17
09682.1	CARPET (AIR FORCE) (SPK DISTRICT GUIDE)	04/89.	1075 pp. 2015 pp. 2015 pp.
09690	CARPET TILE (AIR FORCE) (SPK DISTRICT GUIDE)	04/89	0.99 (A) 0.99 (A) 0.99 (A)
09706	INDUSTRIAL RESINOUS FLOORING	04/89	

CSI NUMBI	ER TITLE	DATE	COPY
09900	PAINTING, GENERAL	04/89	
09960	VINYL COATED WALL COVERING	04/88	
	DIVISION 10 - SPECIALTIES		
10160	METAL TOILET PARTITIONS	02/87	
10270	RAISED FLOOR SYSTEM	11/88	
10430	EXTERIOR SIGNAGE	04/89	118 12 118 12
10440	INTERIOR SIGNAGE	04/89	
10552	MAILBOXES AND LETTERDROPS (SPK DISTRICT GUIDE)	04/89	#105 - 15 115 - 15 115 - 15
10615	DEMOUNTABLE PARTITIONS	12/88	1075 075 5157 154
10800	TOILET ACCESSORIES	01/90	
10900	WARDROBES	04/89	
	DIVISION 11 - EQUIPMENT		
11022	DOORS; FIRE-INSULATED, RECORD-VAULT	12/88	2015 0 Pt 2015 1 Pt
11140	FUELING SYSTEM FOR MOTOR VEHICLES STATION	11/88	2:32:53 2:32:53
11162	LOADING DOCK LEVELER	11/88	1862 1865
11181	INCINERATORS, GENERAL PURPOSE	02/90	
11182	INCINERATORS, MEDICAL WASTE	02/89	0#16 0#16
11183	INCINERATORS, GENERAL PURPOSE, FIELD ERECTED	02/89	0.000 0.000 0.000 0.000
11211	PUMPS; WATER, CENTRIFUGAL	12/88	
11212	PUMPS; WATER VERTICAL TURBINE	03/89	0.55.0 0.310

CSI NUMB	ER TITLE	DATE	COPY
11241	CHLORINE-FEEDING MACHINES (AUTOMATIC, SEMI-AUTOMATIC AND MANUAL)	12/88)## ##
11242	HYPOCHLORITE-FEEDING MACHINES	01/89	2005 (St. 1000) 2005 (St. 1000) 2005 (St. 1000)
11250	WATER SOFTENERS, CATION-EXCHANGE (SODIUM CYCLE)	02/89	
11310	PUMPS; SEWAGE AND SLUDGE	04/89	0:05:05 0:05:05
11330	SEWAGE BAR SCREEN AND MECHANICAL SHREDDER	04/89	13811
11334	COMMINUTOR	01/89	
11350	SLUDGE-COLLECTING EQUIPMENT	11/89	0-18-05 3-18-05
11365	TRICKLING FILTER	06/90	
11375	AIR-SUPPLY AND AIR DIFFUSION EQUIPMENT FOR SEWAGE TREATMENT PLANTS	10/89	
11380	SLUDGE-DIGESTER GAS, HEATING, AND MIXING SYSTEM	12/89	
11390	PREFABRICATED BIOLOGICAL WASTEWATER TREATMENT PLANT	12/89	
11391	CONTINUOUS LOOP REACTOR WASTEWATER TREATMENT	01/89	
11400	FOOD SERVICE EQUIPMENT	03/89	1:03 -10 1:03 -12
11500	AIR POLLUTION CONTROL	02/89	0.1507c 0.1507c
11701	CASEWORK FOR MEDICAL AND DENTAL FACILITIES	04/88	10 March 10 March 10 March
11710	WARMING CABINETS, STERILIZERS, AND ASSOCIATED EQUIPMENT	12/88	218610 218610 218610

Architectural Engineer Guide Volume III Specifications Dec 1990 CSI NUMBER TITLE DATE COPY <u>DIVISION 12 - FURNISHINGS</u> 12390 KITCHEN CABINETS 11/88 12513 PLASTIC WINDOW SHADES 04/89 12520 AUDIOVISUAL BLINDS AND CURTAINS AND 04/89 LIGHTPROOF SHADES 12540 VENETIAN BLINDS, DRAW CURTAINS AND 08/89 WINDOW SHADES 12710 THEATER CHAIRS 04/89 DIVISION 13 - SPECIAL CONSTRUCTION 13080 SEISMIC PROTECTION FOR MECHANICAL, 04/90 ELECTRICAL EQUIPMENT 13090 X-RAY SHIELDING 11/88 13120 METAL BUILDINGS 04/89 13206 STEEL STANDPIPES AND GROUND STORAGE 12/88 13210 ELEVATED STEEL WATER TANK 01/89 13211 PRESSURE VESSELS FOR STORAGE OF 07/89 COMPRESSED GASES 13234 FLOATING COVER FOR SLUDGE DIGESTION 10/89 TANKS 13290 COMPOSTING TOILET 03/89 13600 SOLAR EQUIPMENT 04/89 11810 11813 13810 ENERGY MONITORING AND CONTROL 08/89 SYSTEM (EMCS) LARGE

CONFIGURATION

CSI NUMB	ER TITLE	DATE	COPY
13811	ENERGY MONITORING & CONTROL SYSTEM (EMCS) MEDIUM CONFIGURATION	07/89	118175 118175
13812	ENERGY MONITORING AND CONTROL SYSTEM (EMCS) SMALL CONFIGURATION	06/89	
13813	ENERGY MONITORING AND CONTROL SYSTEM (EMCS) MICRO SYSTEM CONFIGURATION	08/89	1:2:b 1:2:0
13814	BUILDING PREPARATION FOR ENERGY MONITORING AND CONTROLS SYSTEMS (EMCS)	04/89	
	DIVISION 14 - CONVEYING SYSTEM	<u>IS</u>	
14210	ELEVATORS, ELECTRIC	03/90	
14240	ELEVATORS, HYDRAULIC	11/88	1,1803 11,513 11,513
14580	PNEUMATIC TUBE SYSTEM	03/89	1,812 1,873
14630	CRANES, ELECTRIC OVERHEAD TRAVELING TOP-RUNNING AND UNDERHUNG 30-TON CAPACITY	05/89	115 ch 115 ch
	<u>DIVISION 15 - MECHANICAL</u>		
15060	FIBERGLASS REINFORCED PIPE (FRP) FOR CONDENSATE LINES (SPK DISTRICT GUIDE)	04/89	10 10 10 10 20 10 10 20 10
15052	WELDING, PRESSURE PIPING	12/88	1355 1355
15175	POL STORAGE IN UNDERGROUND TANKS (SPK DISTRICT GUIDE)	04/89	0.800 0.800
15250	THERMAL INSULATION FOR MECHANICAL SYSTEMS	07/89	1313 1313

CSI NUMB	ER TITLE	DATE	COPY
15365	HALON 1301 FIRE EXTINGUISHING SYSTEM	07/89	
15400	PLUMBING, GENERAL PURPOSE	07/89	
15410	PLUMBING, HOSPITAL	05/84	1383 1383
15488	GAS PIPING SYSTEMS	01/89	30000 10000
15495	HYDRAULIC FLUID POWER SYSTEM	03/89	
15501 (15300	SPRINKLER SYSTEMS, FIRE PROTECTION	10/80	11811 11811 11811
15506	AFFF FOAM FIRE PROTECTION, DETECTION AND ALARM SYSTEM (SPK DISTRICT GUIDE)	06/90	1076 (A 1076 (A
15555	CENTRAL HIGH TEMPERATURE WATER (HTW) GENERATING PLANT AND AUXILIARIES	06/89	1981 1981 1981
15556	HEATING SYSTEM; FORCED-HOT-WATER, HIGH TEMPERATURE WATER CONVERTER & STEAM CONVERTER	12/85	989 989
15557	FORCED HOT WATER HEATING SYSTEMS, OIL, GAS OR COMBINATION OIL/GAS FIRED	06/88	5,75,15 1,831,5
15559	CENTRAL STEAM-GENERATING SYSTEM, COAL-FIRED	03/89	10 2:1 112:13
15560	CENTRAL STEAM-GENERATING SYSTEM, OIL-FIRED	07/89	11 (12 (12 (12 (12 (12 (12 (12 (12 (12 (
15561	CENTRAL STEAM GENERATING SYSTEM, COMBINATION GAS AND OIL-FIRED	06/89	
15562	HEATING AND UTILITIES SYSTEMS, CENTRAL STEAM	07/89	3,35,05 3,35,03
15565	HEATING SYSTEM; GAS-FIRED HEATERS	03/89	
15566	WARM AIR HEATING SYSTEMS	02/89	
15567	FORCED HOT WATER - SMALL HEATING SYSTEM	03/90	

CSI NUMBI	ER TITLE	DATE	COPY
15568	STEAM - SMALL HEATING SYSTEM	03/90	01 W 1 G 11 W 1 G 11 W 1 G
15650	CENTRAL REFRIGERATION SYSTEM (FOR AIR- CONDITIONING SYSTEM)	01/86	544 1446 1446 1446
15652	COLD STORAGE REFRIGERATION SYSTEMS	07/89	9:00:00 1:00:00
15653	AIR-CONDITIONING SYSTEM (UNITARY TYPE)	07/89	71 M C C C C C C C C C C C C C C C C C C
15654	COMMISSARY REFRIGERATION SYSTEM	09/89	10 (4) 11 (4) 11 (4)
15690	EVAPORATIVE COOLING SYSTEM	12/88	9.500 9.500
15775	BUILT-UP HEAT PUMP SYSTEM	02/89	
15805	AIR SUPPLY AND DISTRIBUTION SYSTEM FOR HEATING, VENTILATING AND AIR CONDITION SYSTEM)	07/89	100 to 10
15845	ENERGY RECOVERY SYSTEMS	02/89	11 (5 t) 11 (6 t) 11 (6 t)
15851	OVERHEAD VEHICLE TAILPIPE [AND WELDING FUME] EXHAUST SYSTEM(S)	12/87	125 cm
15907	TESTING AND BALANCING AIR AND WATER SYSTEMS	04/84	1960 1960 1960
15935	VENTILATION AND EXHAUST SYSTEMS	03/89	143614 133813
15940	OVERHEAD VEHICLE TAILPIPE [AND WELDING FUME] [EXHAUST SYSTEM(S)	06/89	的基础 经基础
15950	HEATING, VENTILATING AND AIR- CONDITIONING HVAC CONTROL SYSTEMS	07/90	社会社 主義社
15990	TESTING, ADJUSTING AND BALANCING OF HVAC SYSTEMS	10/89	142 to 14
	DIVISION 16 - ELECTRICAL		
16113	UNDERFLOOR DUCT SYSTEM	12/88	1435-15 1436-15
16115	UNDERFLOOR RACEWAY SYSTEM (CELLULAR STEEL FLOOR)	02/89	

CSI NUMB	ER TITLE	DATE	COPY
16224	STATIONARY GAS TURBINE GENERATORS	03/89	19818 19818
16225	STATIONARY STEAM TURBINE GENERATORS	03/89	17 (4 th 17 (4 th
16262	AUTOMATIC TRANSFER [AND BY-PASS/ISOLATION] SWITCHES	04/89	
16263	DIESEL GENERATOR SET STATIONARY 100-2500 KW, WITH AUXILARIES	10/83	
16264	GENERATING UNITS, DIESEL-ELECTRIC, STATIONARY, 10-99 KW, WITH AUXILARIES	03/89	20512 30313
16311	MAIN ELECTRIC SUPPLY STATION	12/89	14501 14503
16370	ELECTRICAL DISTRIBUTION SYSTEM, AERIAL	12/89	1:16:11 1:12:11
16375	ELECTRICAL DISTRIBUTION SYSTEM, UNDERGROUND	12/89	10818 10818
16415	ELECTRICAL WORK, INTERIOR	07/90	3:33:35 3:33:33
16475	COORDINATED POWER SYSTEM PROTECTION	01/29	0.00.00 0.00.00 0.00.00
16505	PROTECTIVE LIGHTING SYSTEM	12/89	11 12 12 12 12 12 12 12 12 12 12 12 12 1
16610	UNINTERRUPTIBLE POWER SYSTEM (UPS)	03/89	1165 H 1186 H
16640	CATHODIC PROTECTION SYSTEM (SACRIFICIAL ANODE)	12/88	2000 2000 2000
16641	CATHODIC PROTECTION SYSTEM (STEEL WATER TANKS)	02/89	11878 11873
16642	CATHODIC PROTECTION SYSTEM (IMPRESSED	03/89	10000
16665	CURRENT) STATIC ELECTRICITY PROTECTION SYSTEM	07/89	1081/2 1181/3
16670	LIGHTNING PROTECTION SYSTEM	12/88	11 E 17 11 E 18
16721	FIRE DETECTION AND ALARM SYSTEM	12/88	7155.00 2782.00
16722	FIRE ALARM REPORTING SYSTEM, RADIO TYPE	03/89	1:8:15 1:8:15

CSI NUMBI	ER TITLE	DATE	COPY
16741	TELEPHONE SYSTEM INSIDE PLANT	06/89	11313 11313
16742	TELEPHONE SYSTEM OUTSIDE PLANT	07/89	
16750	NURSE CALL SYSTEM	07/89	
16753	WIRELINE DATA TRANSMISSION MEDIA FOR SECURITY SYSTEMS	12/89	11973 11973 11973
16754	FIBER OPTICS DATA TRANSMISSION MEDIA FOR SECURITY SYSTEMS	12/89	1:35:00 1:35:00 1:35:00
16755	SIGNALING SYSTEM, DOCTOR'S PAGING	05/89	11810 11812
16760	INTERCOMMUNICATION SYSTEM	06/89	13411 13411
16766	CENTRAL DICTATION SYSTEM	04/89	1:18:0: 1:2:18
16770	RADIO AND PUBLIC ADDRESS SYSTEMS	12/88	
16781	MASTER ANTENNA TELEVISION SYSTEM	04/89	
16790	STAND-ALONE ONE-WAY RADIO CONTROL SYSTEM	03/89	3) <u>25 (3</u> 3) <u>25 (3</u>
16792	WIRE LINE DATA TRANSMISSION SYSTEM	07/89	
16794	COAXIAL CABLE DATA TRANSMISSION SYSTEM	06/89	21814 21823
16795	FIBER OPTICS DATA TRANSMISSION SYSTEM	06/89	
16797	ONE-WAY RADIO CONTROL SYSTEM FOR ENERGY MONITORING AND CONTROL SYSTEM (EMCS)	07/89	11818 11818 11818
16798	TWO-WAY RADIO DATA TRANSMISSION	03/89	
16855	ELECTRIC SPACE HEATING EQUIPMENT	12/88	2095 ch 2085 ch

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APPENDIEZ P

INDEX OF GUIDE SPECIFICATIONS
FOR CIVIL WORKS CONSTRUCTION



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THE MOST CURRENT GUIDE SPECIFICATIONS ARE AVAILABLE ON THE ELECTRONIC BULLETIN BOARD. THE INDEX IS UPDATED WEEKLY; CHECK THE BOARD FOR THE MOST UP-TO-DATE GUIDE SPECIFICATIONS. THE FOLLOWING LISTING IS PROVIDED AS GUIDANCE ONLY WHEN REQUESTING HARD COPIES.

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MIMPER	MITMIR (C. Annua Dana)	D.A.M.P.	,	LATEST AMENDMI NUMBER		COPY
NUMBER	TITLE (& Approx Pages)	DATE		(& Date	<u>;) </u>	REQUEST
CE-1102	Dredging (11)	Apr	60			1986 1986 1986
CE-1103	Photogrammetric Mapping and Complementary Field Surveys (52)	Nov	65	1(Mar	66)	5000 9803
CE-1104	Aerial Photography for Photogrammetric Mapping, Photo Maps and Mosaics (26)	Mar	66			
CE-1201	Subsurface Drilling, Sampling and Testing	Apr	61			11810 11813
CE-1301	Clearing (10)	Sep	69			986 986
CE-1304.04	Piling; Concrete, Precast (15)	Apr !	52	1(Apr	56)	
CE-1305.01	Foundation Drilling & Grouting (29)	Oct :	59	3(Apr	72)	12 (12 th 14 (2 th 14 (2 th)
CE-1305.02	Tunnel Grouting (22)	Nov :	59	1(May	64)	1:15:15 17:15:15
CE-1307	Relief Wells (33)	Feb 1	72			1000
CE-1308	Stone Protection (Slopes & Channels) (22)	Jul !	58	2(Jul	62)	
CE-1309	Levees (44)	Mar	68	1(Nov	69)	10000 10000
CE-1404.04	Insulated Wire and Cable (For Hydraulic Structures) (13)	Aug	81			20%/2 20202 20202
CE-1506	Vertical Lift Crest Gates (55)	Jul !	53	6(0ct	63)	
CE-1507.01	Tractor Gates - Broome Type (94)	Jun !	50			986 588
CE-1602	Dam Gantry Cranes (153)	Apr :	75			14.4 14.6

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CE-1603	Draft Tube Gantry Cranes (132)	Aug	81		
CE-1604.01	Indoor Electrically Operated Traveling Crane for Hydroelectric Power Plants (Alternating Current) (103)	Jan	74		11865 11863
CE-1604.02	Indoor Electrically Operated Traveling Crane for Hydroelectric Power Plants (Direct Current) (112)	Apr	73		1989 1989
CE-1701	Elevators for Dams Geared Type (A-C) (39)	Apr	65	2(Jul 67)	
CE-1907	Electrical Equipment (For Gate Hoists) (52)	Sep	69		10000
CE-2201.01	Hydraulic Turbines - Francis Type (145)	0ct	80		
CE-2201.02	Hydraulic Pump-Turbines Francis Type (138)	Mar	69		
CE-2201.03	Hydraulic Turbines Kaplan Type (152)	Mar	69		
CE-2201.06	Governors for Hydraulic Turbines and Pump-Turbines (83)	Apr	81		938 (2) 338 (3)
CE-2202.01	Hydraulic-Turbine-Driven Alternating Current Generators (156)	Sep	80		
CE-2203	Power Transformers (89)	Dec	82		
CE-2204.01	Outdoor Oil Circuit Breakers (121 to 242 kv) (52)	May	83		1986 (1) 1986 (3)
CE-2204.02	Outdoor Group-Operated Disconnecting Switches and Insulators (69 to 230 kv) (37)	Jul	69		
CE-2204.04	Outdoor Surge Arresters (Station Class Gapped Valve Type) and (Station Class Zinc-Oxide Valve Type) (23)	Apr	84		983 983 983
CE-2205.02	13.8 kV Metal-Clad Switchgear, Generator Neutral Grounding Equipment and Metal- Enclosed Bus (55)	Apr	84		183

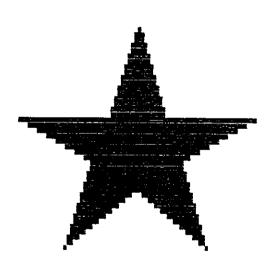
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CE-2205.05	Auxiliary Power Distribution Centers (45)	Jul	83		112-11 112-13 112-13
CE-2206	Carbon Dioxide Fire Extinguishing Equipment (For Hydroelectric Power Plants) (33)	Jun	79		
CE-2207	Insulating Oil, Electrical (10)	Mar	79		9869 9866
CE-2301	Electric Motors3 Phase, Vertical Induction Type (For Flood-Control Pumping Stations) (27)	Jun	82		1960 1960 1960
CE-2302	3-Phase Vertical Synchronous Type 1500 Horsepower and Above (For Flood Control Pumping Stations) (33)	Feb	83		1 (2) (4) (4) (5) (5) (5) (5) (5) (5
CE-2303.01	Pumps-Vertical Propeller Type (69)	Feb	80		100 to 100 to
CE-4000	Lump-Sum Contract for Engineer Services for Design of Hydroelectric Power Plant (65)	Aug	74		
CW-01430	Environmental Protection (17)	Ju1	78		146 136
CW-02212	Embankment (For Earth Dams) (39)	Feb	76		
CW-02214	Soil-Bentonite Slurry Trench Cutoffs (23)	May	85		1880 1887
CW-02215	Geotextiles Used as Filters (16)	Mar	86		1366 1466
CW-02219	Foundation Preparation (14)	Mar	81		
CW-02311	Round Timber Piles (For Hydraulic Structures) (21)	Feb	76		19853 19873
CW-02315	Steel H-Piles (13)	Feb	76		
CW-02411	Metal Sheet Piling (20)	Mar	89		
CW-02541	Wire Mesh Gabions (Slope and Channel Protection) (15)	Feb	80		
CW-03101	Formwork for Concrete (13)	Mar	78	1(Oct 82)	2:825 1888
CW-03150	Expansion, Contraction and Construction	Apr	80		

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APPENDIX 9

OUTLINE SPECIFICATIONS



APPENDIX Q

	<u>F</u>	PECIFICATIONS OR ON OF JOB)	(Date) (or Revised Date)
Section No.	<u>Title</u>	Guide No.	Specific Data
DIVISION 2 - SI	TTE WORK		
02050	Demolition	CEGS-02050	None
02201	Excavation, Filling and Backfilling for Buildings	CEGS-02201	NOTE TO A-E: State if borrow is required and where obtained, on or off (Base) (Post) Belled Caissons: Excavate and drill
			for belled caissons at walls where shown. Provide protection for cave-ins and ground water. Reach hard rock before forming bell. Raise casing and shoring progressively with concrete placing.
			<u>Topsoil</u> : Remove to a depth of inches and stockpile where directed.
			<u>Soil Poisoning:</u> Required
02221	Excavation, Trenching and Backfilling for Utility Systems	CEGS-02221	None
02450	Concrete Sidewalks, Curbs, and Gutters	CEGS-02450	None
02559	Bituminous Prime Coat	CEGS-02559	None (See Foundation Report)

Title Section No. <u>Guide No.</u> Specific Data <u>DIVISION 2 - SITE WORK</u> 02713 Water Lines CEGS-02713 NOTE TO A-E: All options, except where corrosive conditions of soil prohibit use. (See Foundation Report) DIVISION 3 - CONCRETE 03300 Concrete CEGS-03300 Class A for building superstructure, curbs and gutters; Class B for foundations, slab on grade, sidewalks

and belled caissons; non-slip finish on stair treads and building entrance slabs; retained inplace metal forms; perimeter insulation

(2-inch)



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INDEX OF ABRIDGED GUIDE SPECIFICATIONS - MILITARY CONSTRUCTION

CEAGS		_	
NUMBER 01000A	TITLE CEAGS General Notes	DATE Sep 90	COPY
0100011	CARDO CERCIAL ROCCO	Бер У	
01020A	CEAGS Template	Sep 90	1,5,0 1,503
03300A	Concrete for Building Construction	Aug 90	10313 11313
07220A	Roof Insulation	May 90	1:3:3 1:3:3
07530A	Elastomeric Roofing (EPDM)	Jul 90	383 383
07550A	Protected Membrane Roofing	May 90	
07600A	Sheet Metalwork, General	May 90	::3:3 ::5:3
08510A	Steel Windows	May 90	00 0 0 00 04 04 01
08520A	Aluminum Windows	Jul 90	(1818) (1818)
08610A	Wood Windows	Aug 90	1:9:0 ::3:3
08810A	Glass and Glazing	May 90	
09570A	Hardwood Parquet Flooring	May 90	90 9 08 90 9 08
09650A	Resilient Flooring	May 90	09:0 19:0
09680A	Carpet	Jul 90	1913
11211A	Pumps: Water, Centrifugal-Electric Motor	Jun 90	11 3 13
15250A	Thermal Insulation for Pipe	Jun 90	
15250B	Thermal Insulation for Duct	Jun 90	1:0:0 1:5:3 1:5:3
15250C	Thermal Insulation for Mechanical Equipment	Jul 90	::3:13 ::3:13
16640A	Cathodic Protection System (Sacrificial Anode)	Jun 90	10B211 10B211